IRISH ENDOCRINE SOCIETY

50th ANNUAL MEETING



Meeting Programme and Abstract Book

(Abstracts will be published online in Endocrine Abstracts)

13th and 14th November 2026

University College Cork

Local Organiser: Dr. Mark Hannon

Disclosure statement

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(Listed in alphabetical order)



Irish Endocrine Society

Welcome to the 50th Annual Meeting of the Irish Endocrine Society

On behalf of the Irish Endocrine Society, I am delighted to welcome you to Cork for the 50th Annual meeting of the Irish Endocrine Society.

The Society continues to grow and be vibrant with an increasing membership and a record number of abstracts submitted for this meeting.

I would like to particularly welcome our keynote speakers Professor Mirjam Christ Crain, Professor Colin Hawkes and Professor Carla Moran.

I also look forward to presenting the lifetime achievement award to Professor Chris Thompson at the annual dinner this evening.

Please also mark in your diaries the dates for the Study Day in February.

With best wishes,

Steve J. Hunter

Prof. Steven Hunter

President of the Irish Endocrine Society



	Novo Lecture (named in 2016 as the Hadden lecture)	**Nordisk Lecture** (named in 2016 as the McKenna Lecture)
1976	DK O'Donovan	
1977	S Bloom	
1978	J.H.S. Robertson	
1979	A.G.Cudworth	
1980	D.A.D. Montgomery	
1981	Peter Watkins	
1982	G. Joplin	
1983	D.R. London	
1984	A.X. Bertagna	
1985	Malcolm Natrass	Laurence Kennedy
1986	Brian Frier	JB Ferriss
1987	Maurice Scanlon	TJ McKenna
1988	D.A. Heath	AB Atkinson
1989	J Ward	GH Tomkin
1990	R. Volpe	KD Buchanan
1991	Michael Besser	PPA Smyth
1992	R.V. Ragontte	DH Hadden
1993	Bruce Weintraub	David Powell
1994	Oscar Croffard	Patrick Bell
1995	Robert Lindsay	Brian Sheridan
1996	C.R.W. Edwards	Rosemary Freaney
1997	Stephanie Amiel	David McCance
1998	Robert Turner	Randle Hayes
1999	Ian Hay	Sean K Cunningham
2000	Stephen O'Rahilly	Michael Cullen
2001	Andre Lacroix	Daphne Owens
2002	J. Tuomilehto	CJ Thompson
2003	Tony Weetman	John Nolan
2004	R.V. Thakker	RGR Firth
2005	P.M. Stewart	FPM O'Harte
2006	Kevin Docherty	CH Walsh
2007	Lynnette Nieman	Timothy O'Brien
2008	Ken Ho	Donal O'Shea
2009	Daniel J. Drucker	Steven Hunter
2010	Joseph G. Verbalis	James Gibney
2011	Thomas A. Buchanan	Maria Byrne
2012	Beverly M.K. Biller	Fidelma Dunne
2013	Mark McCarthy	Diarmuid Smith
2014	Karel Pacak	Sean F Dinneen
2015	European Society of Endocrinology meeting, Dublin	
	Hadden Lecture	**McKenna Lecture**
2016	David M. Nathan	Amar Agha
2017	Marta Korbonits	Aine McKillop
2018	Bernard Zinman	Paula O'Shea
2019	William B Drake	Mark Sherlock
2020	Helen Murphy	Donal O'Gorman
2021	Eberhard Nieschlag	Hilary Hoey
2022	Andrew Hattersley	Karen Mullan
2023	Gudmundur Johannsson	Francis Finucane
2024	Maralyn Druce	Seamus Sreenan
2025	Pratik Choudhary	Hamish Courtney
2026	Mirjam Christ-Crain	Carla Moran

PRESIDENTS OF THE IRISH ENDOCRINE SOCIETY

YEAR	PRESIDENT
1976	DAD Montgomery
1978	DK O'Donovan
1980	MI Drury
1982	DJ O'Sullivan
1984	J Weaver
1986	J Devlin
1988	DR Hadden
1990	GM Tomkin
1992	AB Atkinson
1994	TJ Mc Kenna
1996	JB Ferriss
1998	JR Hayes
2000	J O'Donnell
2002	PPA Smyth
2004	B Sheridan
2006	PM Bell
2008	RGR Firth
2010	DJ O'Halloran
2012	T O'Brien
2015	F O'Harte
2018	BT Kinsley
2021	F Dunne
2024	SJ Hunter

Committee Members 2026

President	Professor Steven Hunter
Honorary Secretary	Dr Maeve Durkan
Communication Officer	Dr Pyeh Kyithar
Honorary Treasurer / Munster	Dr Mark Hannon (term ends 2026)
Leinster	Dr Ann McGowan (term ends 2029)
Basic Science	Professor Graham Lee (term ends 2027)
Paediatrics	Dr Tracey Conlon (term ends 2028)
Ulster	Dr Neil Black (term ends 2029)
Connacht	Dr Elizabeth Brosnan (term ends 2027)
Paediatrics/Subgroups	Dr Sinead Glackin (term ends 2027)

The 50th Annual Meeting of the Irish Endocrine Society - Programme

Friday 13th November 2026 **CPD points = 6 hours**

0800	**Attendees will put up posters in Poster Hall (Devere Hall) - Velcro provided**
0800-1200	**RCPI STC meeting and IES subsection meetings X 3 (Meeting rooms upstairs from Devere Hall)**
0930-1100	**Meet the Professor session with the invited Hadden Lecture speaker (Aula Maxima)**
	6 Case presentations by trainees with discussions
1100	**Trade exhibition / Refreshments / Poster presentations (Devere Hall)**
1125	**Formal meeting opening (Aula Maxima)**
	Welcome Speech by Professor Steven Hunter (President of the IES, Consultant Endocrinologist, Regional Centre for Endocrinology & Diabetes, Royal Victoria Hospital, Belfast)
1130	**4 oral presentations (4 x 15 minutes) OC1-4**
1230	**Paediatric Keynote Lecture: "GH or not GH – that is the question" - Prof Colin Hawkes (Consultant Paediatric Endocrinologist, Cork University Hospital)**
1315	**Trade exhibition / Lunch / Poster presentations (Devere Hall)**
1500	**3 oral presentations (4 x 15 minutes) OC5-7 (Aula Maxima)**
1545	**6 invited case presentations (6 x 10 minutes) CR1-6**
1645	**Celebrating 50 years of the Irish Endocrine Society – Prof. Sean Dinneen (Consultant Endocrinologist, University College Hospital Galway / National University of Ireland, Galway)**
1700	**Hadden Lecture: "AVP deficiency" - Professor Mirjam Christ-Crain (Professor of Endocrinology, University Hospital of Basel, Switzerland)**
1800	**Meeting break**
1930	**Drinks reception and gala dinner (Kingsley Hotel)**

Saturday 14th November 2026 **CPD points = 3 hours**

0800	**Annual General Meeting (Aula Maxima)**
0900	**2 oral presentations (2 x 15 minutes) OC 8-9**
0930	**McKenna Lecture: "Advancing diagnosis, phenotyping and management of rare thyroid disease" - Professor Carla Moran (Consultant Endocrinologist, Beacon Hospital / St. Vincent's University Hospital, Dublin)**
1030	**Trade exhibition / Refreshments / Poster presentations (Devere Hall)**
1100	**4 oral presentations (4 x 15 minutes) OC10-13**
1200	**Closing remarks, presentation of awards and grants**
1215	**Meeting close**

Friday 13th November 2026

Oral communications (10 minutes presentation / 5 minutes discussion)

1130-1145 **OC.1 Kidney donation results in a sustained decline in 11β-hydroxysteroid dehydrogenase type 2 activity, independent of renal function.**

Maria Tomkins1,2, Darran Mc Donald1,2, Fozia Shaheen3, Angela E Taylor3, Laura Austin1, Dilly Little1, Niall Davis1, Neal Dugal1, Gordon Smyth1, Carol Traynor1, Conall O'Seaghdha1, Wiebke Arlt3,4,5, Michael W. O'Reilly1,2, Mark Sherlock1,2

1Beaumont Hospital, Dublin, 2Royal College of Surgeons in Ireland, Dublin, 3Institute of Metabolism and Systems Science, University of Birmingham, Birmingham, UK, 4Medical Research Council Laboratory of Medical Sciences, London, UK, 5Institute of Clinical Sciences, Imperial College London, London, UK

1145-1200 **OC.2 Chronic unimolecular GLP-1/APJ receptor co-agonists improve glucose homeostasis, dyslipidaemia and hepatic biomarkers in diet induced obese mice.**

Finbarr PM O'Harte, Ananyaa Sridhar, Ethan S Palmer, Sarah L Craig, Neil Tandy and Nigel Irwin.

Diabetes Research Group, Ulster University, Coleraine, N. Ireland

1200-1215 **OC.3 Can fasting glucose and glycaemic response to a 75 g OGTT guide MODY genetic testing**

Sarah F Dowling1,2, Patrick McCluskey1, Emma L Prehn1, Eimear M O'Donovan1, Genesis A Gabo1, Rachel Cullen1, Maria M Byrne1,2

1) Mater Misericordiae University Hospital, Dublin, Ireland 2) University College Dublin, Dublin, Ireland

1215-1230 **OC. 4 Classic and 11-oxgenated androgens induce differential changes in systemic and tissue-specific energy metabolism in women with polyendocrine metabolic ovarian syndrome: results of a metabolic phenotyping study**

Tara McDonnell 1,2, Leanne Cussen 1,2, Clare Miller 1,2, Benson Jacob 1, Angela E. Taylor 3, Lorna Gilligan 3, Wiebke Arlt 3,4, Karl-Heinz Storbeck 4,5, Thomas Marjot6, Kieran Smith6, Elspeth Johnson6, Catherine Winder8, Leanne Hodson 6, Jeremy Tomlinson 6, Marie McIlroy7, Warwick Dunn8, Mark Sherlock 1,2, Michael W. O'Reilly 1,2

1Academic Division of Endocrinology, Department of Medicine, Royal College of Surgeons in Ireland, Dublin, Ireland, 2Department of Endocrinology, Beaumont Hospital, Dublin, Ireland, 3Metabolism and Systems Science, University of Birmingham, Birmingham, United Kingdom, 4Medical Research Council Laboratory of Medical Sciences, London, United Kingdom; 5Institute of Clinical Sciences, Imperial College London, London, United Kingdom, 5Department of Biochemistry, Stellenbosch University, Stellenbosch, South Africa, 6Oxford Centre for Diabetes, Endocrinology, and Metabolism, NIHR Oxford Biomedical Research Centre, Oxford, United Kingdom, 7 Department of Surgery, RCSI University of Medicine and Health Sciences, 8Centre for Metabolomics Research, Institute of Systems, Molecular and Integrative Biology, University of Liverpool, Liverpool, UK

1500-1515 **OC. 5 Language Matters: Guidance for person-centred diabetes communication in Ireland**

Cathy Breen1,2* Sinead Powell3 * Ellie Patterson 4, Meabh Finnegan 5 Amy McInerney 6, Gráinne Flynn 7, Assumpta Coyle 8,9, Kate Gajewska 3 Helen Kavanagh10, 11, Deirdre Cunningham8, Joanne Lowe12 , Bernie Kelly9 Eimear C Morrissey4, Cameron Keighron4, 13, Maura Murphy14, Lisa Devine2, 15, Norma

Deasy10, Rita Forde16, Ann-Marie Creaven17,, Michelle Lowry18, Susie Birney14, Sonya Deschênes5, Tomas P Griffin4, 8,9 *Joint First Authors

1 St Columcille's Hospital, Dublin, Ireland 2 Diabetes National Clinical Programme, Health Service Executive, Dublin, Ireland, 3Diabetes Ireland, Dublin, Ireland, 4University of Galway, Galway, Ireland, 5 University College Dublin, Dublin, Ireland, 6 University of Tübingen, Tübingen, Germany, 7Thriveabetes, Ireland, 8 Galway University Hospitals, Galway, Ireland, 9 Community Healthcare West, Health Service Executive, Galway, Ireland, 10 National Screening Service, Health Service Executive, Dublin, Ireland, 11 Seven Nations Group (Ireland, Northern Ireland, Scotland, England and Wales, Jersey and Guernsey, Diabetic Screening Programmes DR screening in Europe), UK, 12 Diabetes Integrated Care Hub, Clonskeagh, Dublin, Ireland, 13 International Diabetes Federation Europe, Brussels, Belgium, 14 Irish Coalition for People living with Obesity, Dublin, Ireland, 15 Irish College of General Practitioners, Dublin, Ireland, 16 University College Cork, Cork, Ireland, 17 University of Limerick, Limerick, Ireland, 18 Trinity College Dublin, Dublin, Ireland

1515-1530 **OC.6 Defective Vδ2+ T cell metabolic and functional responses in obesity are reversed with bariatric surgery**

Ciara L. Flynn1, Eimear K. Ryan1, Czara Kennedy2, Katherine G. Egan2, Helen M. Heneghan2, Andrew Hogan1 and Donal O'Shea2

Kathleen Lonsdale Institute for Human Health Research, Maynooth University, Maynooth, Co Kildare. Ireland. 2. St Vincent's University Hospital & University College Dublin, Dublin, Ireland.

1530-1545 **OC.7 SARS-CoV-2 Exacerbates Vascular Calcification Under Diabetic Conditions in Human Lung Microvascular Endothelial Cells**

Niamh S Donnelly, Ruairi Keogh, Ellen Lynch, Paul J Buchanan, Keith D Rochfort

1.School of Nursing, Psychotherapy, and Community Health, Dublin City University, Dublin, Ireland, 2.School of Biotechnology, Dublin City University, Dublin, Ireland, 3.Life Sciences Institute, Dublin City University, Dublin, Ireland

Case report presentations (5 minutes presentation / 5 minutes discussion)

1545-1555 **CR.1 Case Report - Rapid Progression of Diabetic Nephropathy to Antenatal Haemodialysis in Pregnancy**

Kristyn Dunlop1, Patrick McCluskey2, Darren Rattigan2, Maria Kennelly1, Denise M Sadlier2, Maria M Byrne2

1 Rotunda Hospital, Dublin 2 Mater Misericordiae University Hospital, Dublin

1555-1605 **CR.2 Case Report - A case of hypercalcaemia in pregnancy due to CYP24A1 variants**

Laura Ryan1, Liliana Mazalu1, Seán J Costelloe1, Caroline M Joyce1,2, Mairead O'Riordan2,3, Antoinette Tuthill1,3

1 Cork University Hospital, Cork, 2 Cork University Maternity Hospital, Cork,
3School of Medicine, University College Cork, Ireland

1605-1615 **CR.3 Case Report- Atypical femoral fracture; A late diagnosis of Hypophosphatasia**

Michael O'Meara, Gerard Boran

Clinical Chemistry Laboratory, Tallaght University Hospital, Dublin 24

1615-1625 **CR.4 Case Report-A Rare and Challenging Case of Metastatic Parathyroid Carcinoma in a Young Male**

Rayanna Maraj, Namra Iqbal, Michael McCarthy, Orla Young, Anne Marie Quinn, Marcia Bell

University Hospital Galway, Galway, Ireland

1625-1635 **CR.5 Case Report: Hybrid-Closed Loop Therapy in a Patient with Significant Visual Impairment and Complex Comorbidity Undergoing Liver Transplantation**

Niamh C Kyne1, Lok Yi Joyce Tan1, David Fennell1, Elizabeth McGee1, Alanna McKeon Silke1, Mohsin Mukhtar1, Rachel K Crowley1, Dr Elizabeth Brosnan2, Dr Sajjad Sadiq2, Patrick Divilly1

1 St Vincent's University Hospital, Dublin, 2 Mayo University Hospital

1635-1645 **CR.6 Early-Onset Hypertension Due to Glucocorticoid-Remediable Aldosteronism: A Case Report and Family Cascade Screening**

Ciara McNulty, Sara George, Paul Chatee, Orla Neylon, Annemarie Hannon

University Hospital Limerick, Co. Limerick, Ireland

1645 -1655 **Celebrating 50 years of the Irish Endocrine Society**

Prof. Sean Dineen, University College Hospital Galway / National University of Ireland, Galway

Saturday 14th November 2026

Oral communications (10 minutes presentation / 5 minutes discussion)

0900-0915 **OC.8 Lifestyle factors which offset risks associated with pregnancy metabolic complications in women of later reproductive age: findings from the ROLO longitudinal cohort study**

Kristyn Dunlop1, Sophie Callanan1, Kaat Philippe2, Catherine McNestry1, Alexander Douglass2, Ricardo Segurado3, Rachel K Crowley4,5, Patrick J Twomey5, Catherine M Phillips2, Fionnuala M McAuliffe1

1UCD Perinatal Research Centre, School of Medicine, University College Dublin, National Maternity Hospital, Dublin, Ireland, 2School of Public Health, Physiotherapy and Sports Science, University College Dublin, Belfield, Dublin, Ireland, 3 Centre for Support and Training in Analysis and Research, University College Dublin, Dublin, Ireland, 4School of Medicine, University College Dublin, Dublin, Ireland, 5St Vincent's University Hospital, Dublin, Ireland

0915-0930 **OC.9 Investigating the mechanism by which Viruses cause Type 2 Diabetes**

Natasha Marangwanda1, Conor Woods2 and Nigel J. Stevenson1

1Viral Immunology Group, School of Biochemistry & Immunology, Trinity Biomedical Sciences Institute, Trinity College Dublin, Dublin, Ireland. 2Department of Diabetes & Endocrinology, St James's Hospital, Dublin, Ireland

1100-1115 **OC.10 Clinical characteristics, management and outcomes of patients with Succinate Dehydrogenase (SDHx) gene mutations: analysis from a Northern Ireland cohort**

Shabneez Ibrahim1, Kathleen mc Caffrey1, Karen Mullan1, Steven Hunter1 Colin Leonard2, Ben Loughrey1, Hamish Courtney1, Claire McHenry1, Sarah mcKinely1, Gabriella Lupari1, Louis Lau3, Patrick J Morrison4, Shane McKee4, Olivia Sharpe4, Courtney Forgeng4, Titus Cvascuic 5, Simon Rajendran6, Philip C Johnston1

1Regional Centre for Endocrinology and Diabetes, Royal Victoria Hospital, Belfast, 2Department of Otolaryngology, Royal Victoria Hospital, Belfast, 3Department of Vascular Surgery, Royal Victoria Hospital, Belfast, 4Department of Clinical Genetics, Belfast City Hospital, Belfast. 5Department of Endocrine Surgery, Royal Victoria Hospital, Belfast, 6Department of Pathology, Royal Victoria Hospital, Belfast, NI, UK

1115-1130 **OC.11 Inflammation observed in material debrided from diabetic foot ulcers is associated with lower likelihood of healing**

Julie Okiro (1), Kellie Fortune (2), Eimear Daly (2), Rayan AlRasheed (1), Catriona Cahir (1), Clive Kilgallen (3), John H. McDermott (2), Tommy KyawTun (1,2), Fabio Quondamatteo (1), Seamus Sreenan (1,2,4)

(1) Royal College of Surgeons in Ireland University of Medicine and Health Sciences, Dublin, Ireland. 1) Royal College of Surgeons in Ireland University of Medicine and Health Sciences, Dublin, (2) Connolly Hospital, Dublin, Ireland, (3) Beaumont Hospital, Dublin, Ireland (4) Health Research Board Diabetes Collaborative Clinical Trial Network, Ireland

1130-1145 **OC.12 Can lumbar spine and hip DXA scans detect heterogenous bone density changes in patients with XLH over time?**

Emily Riordan, Katrina Mennie, Sarah Forde, Breeda Sweeney, Rachel K Crowley

St. Vincent's University Hospital, Dublin, Ireland

1145-1200 **OC.13 Predicting healing outcome of diabetes-related foot ulcers using autofluorescence of debrided ulcer tissue**

Julie Okiro (1), Kellie Fortune (2), Eimear Daly (2), Rayan AlRasheed (1), Tommy KyawTun (1,2), John H McDermott (2), Seamus Sreenan (1,2,3), Fabio Quondamatteo (1)

(1) Royal College of Surgeons in Ireland, University of Medicine and Health Sciences, Dublin, Ireland, (2) Connolly Hospital, Dublin, Ireland, (3) Health Research Board Diabetes Collaborative Clinical Trial Network, Ireland

1200-1215 **Presentation of Awards & Closing Remarks**

O'Donovan Medal - Best Oral Presentation
Montgomery Medal - Best Poster Presentation
Jennings Medal - Best Paediatric Presentation
Certificate - Best Oral Case Report
Irish Endocrine Society Basic Science Award – 1 grant
Irish Endocrine Society Clinical Science Award – 1 grant
Summer Student Research Bursaries – 4 bursaries

We wish you a safe journey home and look forward to welcoming you to the Annual Study Day in RCPI, Dublin on February 5th 2027 and the 51st Annual Meeting of the Irish Endocrine Society in Galway in late 2027.

Irish Endocrine Society

Lifetime Achievement Award 2026 - Professor Chris Thompson



Professor Chris Thompson went to school at St Cuthbert's RC Grammar school in Newcastle upon Tyne, and graduated MB ChB from the University of Dundee in 1981. He obtained MRCP in 1984 and completed his MD thesis, funded by the MRC, at the University of Newcastle Upon Tyne in 1991. He undertook specialist endocrine training in Newcastle, Edinburgh and Dundee. He was appointed Visiting Associate Professor of Physiology at the University of California, San Francisco, with an MRC Travelling Fellowship. He took a post as a Consultant Endocrinologist in Glasgow, before moving to Beaumont Hospital in 1997.

In Beaumont he raised over €500,000 to build a new diabetes day centre, and set up the first diabetes shared care service and the first adolescent diabetes service in the Republic of Ireland.
Chris established an international reputation in pituitary endocrinology, and in particular salt and water balance, and has led on many of the seminal papers describing the pathophysiology of vasopressin secretion, which culminated in him being the senior author on International Guidelines for the Management of Hyponatremia, which is among the most cited papers in the salt and water balance literature. He established active research programmes in salt and water balance, neuroendocrine consequences of traumatic brain injury and subarachnoid hemorrhage and management of pituitary tumours which established an international reputation for Beaumont hospital. He has published nearly 300 papers, review articles and book chapters and has a H-index of 69. He was awarded the Society for Endocrinology Clinical Trust Visiting Professorship in 2018, one of the highest awards given by the Society.

Chris served as Chairman of Diabetes Ireland between 1999-2004, during which time he led the negotiations to include treatment for hypertension, hyperlipidaemia and heart disease on the long term illness scheme for diabetes. He also led the Diabetes Ireland expeditions, the Four Peaks Challenge, to Kilimanjaro and to the Canadian Rockies.

Chris was a firm supporter of the Irish Endocrine Society, serving as Secretary/Treasurer for four years and as the inaugural Chairman of the Endocrine Section Committee. He won the bid to bring the 2015 European Endocrine Society Meeting to Dublin, and served as Chairman of the local organising committee.

His greatest satisfaction, however, was derived from his mentorship of trainees passing through Beaumont Hospital, and seeing them develop as endocrinologists. He mentored the completion of 15 postgrad degrees, including MScs, MDs and PhDs and 12 off his mentees are now Professors of Endocrinology in their own right. He went on to extend his mentorship more widely as National Specialty Director, developing an on line learning facility during the Covid crisis.

Outside of Medicine, Chris represented Dundee University and UCSF at soccer and won two Hospital Cups with Beaumont Hospital. He won a British University Gaelic Football Championship with Dundee University in 1994. He was doctor to the hurling section at Kilmacud Crokes for 20 years, and for the Dublin Senior Hurling team for eight seasons. He served for 5 years on the Medical and Scientific Section of the GAA.

Chris's career was cut short by serious illness in 2020. He is currently enjoying time with his family, and trying to get his golf handicap back into single figures.

Prof. Mark Sherlock

Abstracts: Oral Communications

OC.1 Kidney donation results in a sustained decline in 11β-hydroxysteroid dehydrogenase type 2 activity, independent of renal function.

Maria Tomkins1,2, Darran Mc Donald1,2, Fozia Shaheen3, Angela E Taylor3, Laura Austin1, Dilly Little1, Niall Davis1, Neal Dugal1, Gordon Smyth1, Carol Traynor1, Conall O'Seaghdha1, Wiebke Arlt3,4,5, Michael W. O'Reilly1,2, Mark Sherlock1,2

1Beaumont Hospital, Dublin, 2Royal College of Surgeons in Ireland, Dublin, 3Institute of Metabolism and Systems Science, University of Birmingham, Birmingham, UK, 4Medical Research Council Laboratory of Medical Sciences, London, UK, 5Institute of Clinical Sciences, Imperial College London, London, UK

The kidney is the principal expression site of 11β-hydroxysteroid dehydrogenase type 2 (11β-HSD2), which converts cortisol to cortisone. We previously demonstrated reduced 11β-HSD2 activity in chronic kidney disease, but the impact of kidney donation on enzyme activity has not been investigated.
In this longitudinal study, 14 kidney donors (median age 42.5 years, 57% male) underwent multisteroid profiling of serum and 24-hour urine samples using liquid chromatography–tandem mass spectrometry pre-donation and post-donation (6 weeks and 6 months). Changes and associations between estimated glomerular filtration rate (eGFR) and steroid concentrations were assessed using Kruskal–Wallis tests with Dunn's post hoc comparisons and linear mixed-effects models.
Renal function declined significantly following donation: median ΔeGFR of −38.5 mL/min (IQR −32 to −45) at 6 weeks, −39.0 mL/min (IQR −35 to −45) at 6 months. Serum cortisol-to-cortisone ratio (F/E) increased in parallel: median ΔF/E of 1.58 (IQR 1.08–2.33) at 6 weeks, 2.62 (IQR 1.72–3.11) at 6 months, indicating reduced 11β-HSD2 activity post-donation. Despite these temporal changes, F/E was not associated with eGFR in mixed-effects models ($\beta = -0.07$, $p > 0.05$). There was no significant difference in blood pressure, adrenocorticotropin, renin, aldosterone or urinary glucocorticoid metabolite concentrations post-donation.
Kidney donation results in a sustained reduction in 11β-HSD2 activity. The absence of a relationship between F/E and eGFR suggests that renal regulation of glucocorticoid metabolism depends on factors beyond glomerular filtration, potentially reflecting the direct contribution of renal tissue mass to systemic cortisol-cortisone interconversion.

OC.2 Chronic unimolecular GLP-1/APJ receptor co-agonists improve glucose homeostasis, dyslipidaemia and hepatic biomarkers in diet induced obese mice.

Finbarr PM O'Harte, Ananyaa Sridhar, Ethan S Palmer, Sarah L Craig, Neil Tandy and Nigel Irwin.

Diabetes Research Group, Ulster University, Coleraine, N. Ireland.

Type 2 diabetes is characterised by impaired glucose regulation, dyslipidaemia and progressive metabolic dysfunction, highlighting the need for therapies targeting multiple metabolic pathways. We evaluated the therapeutic potential of dual glucagon-like peptide-1 (GLP-1) and apelin (APJ) receptor activation using novel unimolecular agonists. High-fat-fed insulin resistant diet-induced obese (DIO) mice were injected once daily for 28 days with the dual GLP-1/APJ receptor agonist exendin-linker-apelin (ELA) or its long-acting acylated analogue, ELA-Lys12(γGluPal). Liraglutide served as a positive control. Metabolic outcomes included food intake, glucose homeostasis, insulin sensitivity, circulating lipid profiles and hepatic biomarkers. Indirect calorimetry assessed energy metabolism, while pancreatic morphology was examined to determine effects on beta-cell turnover. ELA and more notably, ELA-Lys12(γGluPal) significantly reduced food intake, circulating glucose and HbA1c concentrations compared with saline-treated DIO controls. The acylated analogue also improved glucose tolerance, largely independent of changes in circulating insulin. Both GLP-1/apelin hybrid agonists reduced circulating triglyceride and LDL-cholesterol concentrations and normalised hepatic triglyceride accumulation and hepatic transaminase levels. Indirect calorimetry demonstrated restoration of metabolic flexibility following ELA-Lys12(γGluPal) treatment despite reduced energy expenditure. Unlike liraglutide, ELA hybrid peptides did not impair locomotor activity. Histological analysis revealed enhanced beta-cell proliferation and reduced apoptosis without significant changes in islet morphology. Chronic administration of ELA, particularly ELA-Lys12(γGluPal), produced marked metabolic improvements in DIO mice. Thus dual GLP-1/APJ receptor activation offers a promising therapeutic strategy for type 2 diabetes, with multiple benefits for glycaemic control, lipid metabolism and hepatic health.

OC.3 Can fasting glucose and glycaemic response to a 75 g OGTT guide MODY genetic testing

Sarah F Dowling1,2, Patrick McCluskey1, Emma L Prehn1, Eimear M O'Donovan1, Genesis A Gabo1, Rachel Cullen1, Maria M Byrne1,2

1) Mater Misericordiae University Hospital, Dublin, Ireland 2) University College Dublin, Dublin, Ireland

Maturity-onset diabetes of the young (MODY) relies upon next generation sequencing (NGS) for diagnostics which is extremely expensive and prohibits widespread testing.
Current clinical criteria cannot reliably distinguish between common variants such as GCK- and HNF1A-MODY. Additional criteria implicating a single gene may allow targeted Sanger sequencing which is less expensive. GCK (n=68) and HNF1A (n=94) pathogenic variant carriers from the Mater MODY cohort were phenotyped and underwent a 2-hr 75 g oral glucose tolerance test comparing glucose, insulin, and c-peptide response at 30-minute intervals.
Unpaired samples t-tests on SPSS (v 29.0.1.0) were used to compare clinical and metabolic variables. The study was approved by the hospital's research ethics committee (ref. 1/378/2472). GCK and HNF1A groups were age (40.2 ± 16.4 vs 38.0 ± 15.8 years, P = 0.407) and BMI (24.9 ± 3.9 vs 24.8 ± 4.7 kg/m2, P = 0.930) matched. GCK had lower fasting (6.7 ± 0.8 vs 7.6 ± 2.8 mmol/l, P = 0.002) and 2-hr glucose values (8.9 ± 2.6 vs 15.6 ± 5.7 mmol/l, P <0.001). Incremental glucose (0-120 min) was much higher in HNF1A (2.2 ± 2.4 vs 8.9 ± 2.6 mmol/L, P <0.001), with much lower 2-hr C-peptide (1476.5 ± 952.1 vs 1093.8 ± 447.2, P = 0.035). A lower 2-hr glucose and higher 2-hr C-peptide helps discriminate between GCK- and HNF1A-MODY. In addition, a lower incremental glucose favours a diagnosis of GCK-MODY over HNF1A-MODY, allowing for targeted Sanger sequencing.

OC.4 Classic and 11-oxgenated androgens induce differential changes in systemic and tissue-specific energy metabolism in women with polyendocrine metabolic ovarian syndrome: results of a metabolic phenotyping study

Tara McDonnell 1,2, Leanne Cussen 1,2, Clare Miller 1,2, Benson Jacob 1, Angela E. Taylor 3, Lorna Gilligan 3, Wiebke Arlt 3,4, Karl-Heinz Storbeck 4,5, Thomas Marjot6, Kieran Smith6, Elspeth Johnson6, Catherine Winder8, Leanne Hodson 6, Jeremy Tomlinson 6, Marie McIlroy7, Warwick Dunn8 , Mark Sherlock 1,2, Michael W. O'Reilly 1,2

1Academic Division of Endocrinology, Department of Medicine, Royal College of Surgeons in Ireland, Dublin, Ireland, 2Department of Endocrinology, Beaumont Hospital, Dublin, Ireland, 3Metabolism and Systems Science, University of Birmingham, Birmingham, United Kingdom, 4Medical Research Council Laboratory of Medical Sciences, London, United Kingdom; 5Institute of Clinical Sciences, Imperial College London, London, United Kingdom, 5Department of Biochemistry, Stellenbosch University, Stellenbosch, South Africa, 6Oxford Centre for Diabetes, Endocrinology, and Metabolism, NIHR Oxford Biomedical Research Centre, Oxford, United Kingdom, 7 Department of Surgery, RCSI University of Medicine and Health Sciences, 8Centre for Metabolomics Research, Institute of Systems, Molecular and Integrative Biology, University of Liverpool, Liverpool, UK

Polyendocrine metabolic ovarian syndrome (PMOS) is characterised by androgen excess, which is intimately linked with metabolic dysfunction. Circulating androgens in PMOS may be derived from both the classic and 11-oxygenated pathways. Here we aimed to characterise the differential metabolic impact of selectively priming the classic and 11-oxygenated androgen pathways in vivo.
Twenty women with PMOS received the androgen precursor dehydroepiandrosterone(DHEA) or 11-ketoandrostenedione (11KA4), 150 mg daily for 7 days, to prime the classic and 11-oxygenated pathways, respectively. We performed hyperinsulinaemic-euglycaemic (HE) clamp studies alongside untargeted metabolomic profiling of plasma and skeletal muscle(SkM) at baseline and after 7 days.
Across the HE clamp, neither DHEA nor 11KA4 induced significant changes in hepatic or peripheral insulin sensitivity, endogenous glucose production or glucose disposal. However, AUC for glucose oxidation, measured by the incorporation of 13C-glucose into expired CO2, was significantly reduced after DHEA exposure(p=0.04). Untargeted metabolomics revealed widespread perturbations in plasma metabolites in the DHEA group compared to the 11KA4 group (201 metabolites vs 52 metabolites significantly altered). Metabolomic profiling of SkM biopsies revealed widespread significant changes in pathways linked to fatty acid metabolism, lipid trafficking and mitochondrial function in the DHEA group, with only minimal signals after 11KA4 exposure. Using selective androgen pathway priming and innovative metabolic phenotyping approaches, we show tissue-specific metabolic effects of classic and 11-oxygenated androgens in women with PMOS. These data highlight the complexity of androgen-related metabolic disease in women and the likely distinct biological actions of classic and 11-oxygenated androgens.

OC.5 Language Matters: Guidance for person-centred diabetes communication in Ireland

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Language is central to diabetes care; it shapes lived experience, therapeutic relationships, healthcare engagement and self-management. Irish evidence indicates that diabetes-related language can be experienced as negative, judgemental and stigmatising, particularly in healthcare encounters, with adverse associations for diabetes distress, psychological wellbeing and treatment satisfaction. This initiative developed practical, Ireland-specific guidance to support healthcare professionals to use person-centred, strengths-based and non-judgemental communication with and about people living with diabetes.

An Irish multidisciplinary working group, including people living with diabetes, clinicians, researchers and advocacy organisations, co-developed the guidance through an iterative consensus process informed by international Language Matters resources, Irish research and lived-experience testimony. Draft recommendations were refined through subgroup work, whole-group review and structured feedback until consensus was achieved.

The guidance defines core principles: respecting individual language preferences; using person-first language when preferred; avoiding blame, fear, labels and moral judgement; describing clinical data neutrally; validating emotional experience; and supporting collaborative self-management. Recommendations apply across consultations, clinical records, clinic letters, education programmes, multidisciplinary discussions, public messaging and digital care. The guidance also emphasises reflective practice, team consistency, and recognition that communication includes tone, body language, context and perceived intent, not words alone.

Embedding Language Matters principles across Irish diabetes services provides a practical approach to strengthening therapeutic relationships, improving engagement, reducing shame and stigma, and advancing equitable, person-centred diabetes care.

OC.6 Defective Vδ2+ T cell metabolic and functional responses in obesity are reversed with bariatric surgery

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Obesity is a chronic progressive disease that is strongly linked to numerous comorbidities including a higher risk of many infections. These risks are underpinned by a chronic inflammatory environment and significant immune dysregulation. γδ T cells are population of unconventional T cells which are capable of rapidly producing a range of effector cytokines and driving cytotoxic responses. γδ T cells play a critical role in the protection from many infections including influenza and SARS-CoV-2, both of which present major risks for people living with obesity (PWO). We and others have previously described a significant impact of obesity on the other two major unconventional T cell subsets, the invariant natural killer T (iNKT) cell and mucosal associated invariant T (MAIT) cells, however the impact of obesity on humans γδ T cell biology is poorly understood. Here, we investigated circulating γδ T cell metabolic and functional responses in cohorts of PWO and people

without obesity (controls). We report that Vδ2+ T cell frequencies are reduced in PWO, and their effector responses are diminished following stimulation. We identify a CD98-LAMTOR5-mTORC1 metabolic axis critical for Vδ2+ T cell functional responses, and demonstrate significant defects in each component of this metabolic axis in PWO underpinning the defective functional responses. Additionally, we show restoration of this metabolic axis after bariatric surgery which was paired with robust improvements in Vδ2+ T cell functional responses. Taken together, our data highlights that obesity drives a reversible dysregulation of Vδ2+ T cells, a critical component of the host-immune system by disrupting cellular metabolism.

OC.7 SARS-CoV-2 Exacerbates Vascular Calcification Under Diabetic Conditions in Human Lung Microvascular Endothelial Cells

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Individuals with diabetes mellitus are at substantially increased risk of cardiovascular disease, with chronic hyperglycaemia promoting endothelial dysfunction, oxidative stress, and progressive vascular calcification. Calcification of the vascular wall contributes to arterial stiffening, impaired vascular function, and increased cardiovascular morbidity and mortality. Emerging evidence suggests that SARS-CoV-2 infection further increases cardiovascular complications in people with diabetes, with severe COVID-19 associated with vascular injury. However, the mechanisms by which SARS-CoV-2 accelerates vascular calcification in an already compromised diabetic vasculature remain poorly understood.
Using an in vitro human lung microvascular endothelial cell (HLMvEC) model, we investigated how diabetic conditions (30mM) and SARS-CoV-2 spike proteins (S1 and S2), individually and in combination, influence (i) calcium deposition within endothelial cells, (ii) oxidative stress associated with calcification, and (iii) the transcriptional activity of key pro-calcification genes.
Our findings demonstrate that hyperglycaemia significantly increases endothelial calcification compared with healthy control conditions, with calcification progressively increasing over time. Exposure to SARS-CoV-2 spike proteins further exacerbated calcium deposition beyond that observed under hyperglycaemic conditions alone, suggesting that COVID-19 accelerates pre-existing vascular pathology in diabetes. These changes were accompanied by increased reactive oxygen species (ROS) production and enhanced expression of genes associated with osteogenic differentiation and vascular calcification, indicating the development of a pro-calcific endothelial phenotype. Collectively, these findings suggest that SARS-CoV-2 amplifies the pathological effects of diabetes through mechanisms involving oxidative stress and endothelial dysfunction, providing new insights into the increased cardiovascular complications

OC.8 Lifestyle factors which offset risks associated with pregnancy metabolic complications in women of later reproductive age: findings from the ROLO longitudinal cohort study

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Lifestyle factors may modify the association between pregnancy metabolic complications and long-term cardiometabolic risk. This study examined associations between lifestyle behaviours and cardiometabolic outcomes 10 years postpartum, stratified by history of pregnancy metabolic complications. Participants (n=419) from the ROLO longitudinal birth cohort were classified by history of pregnancy metabolic complications (gestational diabetes, impaired glucose tolerance and pregnancy-induced hypertension). At the 10-year follow-up, anthropometry, body composition, non-fasting biochemistry and QRISK®3 scores were assessed. A composite Healthy Lifestyle Score (HLS) incorporating diet quality (Healthy Eating Index-2015), physical activity (METs), alcohol intake and smoking status was derived. Multivariable linear regression models explored whether lifestyle factors associate with cardiometabolic outcomes 10 years postpartum and the interaction effect of prior pregnancy metabolic complication. Higher HLS was associated with lower BMI (β=-1.01,95% CI -1.72,-0.25), total cholesterol (β=-0.29,95% CI -0.56,-0.02) and LDL cholesterol (β=-0.38,95% CI -0.63,-0.12) among women with

history of metabolic complications in pregnancy. Longer breastfeeding duration was associated with lower systolic blood pressure (β=-0.15,95% CI -0.24,-0.06), diastolic blood pressure (β=-0.10,95% CI -0.16,-0.04) and QRISK®3 score (β =-0.01,95% CI -0.01,-0.002) in women with history or metabolic complications in pregnancy. Smoking was associated with higher QRISK®3 risk ($p<0.001$), with greater magnitude in those with prior metabolic complications. BMI remained the strongest independent determinant of cardiometabolic outcomes ($p<0.001$). Higher diet quality, physical activity, smoking avoidance and breastfeeding may partially mitigate elevated metabolic risk in women 10 years after pregnancy metabolic complications.

OC.9 Investigating the mechanism by which Viruses cause Type 2 Diabetes

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Type 2 Diabetes (T2D) can occur when our body becomes resistant to insulin. Infection of viruses, such as Hepatitis C Virus (HCV), is associated with an increased incidence of T2D. However, the mechanism by which viruses induce T2DM is poorly understood. Intracellular insulin signalling triggers the activation of the Insulin Receptor Substrate (IRS), leading to glucose transporter-mediated glucose uptake. Insulin signalling is tightly controlled by regulatory proteins called Suppressor Of Cytokine Signalling (SOCS), which bind IRS, thus blocking further signal transduction. We recently discovered the HCV protein, p7, independently upregulates SOCS proteins, leading us to hypothese that HCV-p7 blocks insulin signalling via its upregulation of SOCS, a process that may be responsible for the development of T2D. The Huh7 hepatocytes were transfected with SOCS3 or HCV-p7 DNA plasmids, followed by insulin stimulation. Cell lysates were analysed by immunoblotting for pIRS1, IRS1, SOCS3 and Beta-Actin. One-way ANOVA and unpaired t-tests were used to measure statistical differences. We found that both insulin treatment and HCV-p7 expression increased SOCS3, which correlated with a reduction in insulin-mediated pIRS1 (n=3). Therefore, this study reveals a novel mechanism by which a viral protein induces insulin resistance and highlights SOCS as potential therapeutic targets to improve insulin sensitivity and potentially a pave the way for a future diabetes cure.

OC.10 Clinical characteristics, management and outcomes of patients with Succinate Dehydrogenase (SDHx) gene mutations: analysis from a Northern Ireland cohort

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Background: Clinical presentation, management and outcomes of patients with Succinate Dehydrogenase (SDHx) gene mutations in Northern Ireland have not been fully characterised to date.
Aims: To provide comprehensive clinical data from a nationwide cohort of SDH patients in Northern Ireland.
Methods: Baseline clinical information and follow up was taken from a prospectively maintained SDH database. Further clinical, radiological and laboratory data were obtained from Northern Ireland Electronic Care Records.
Results: There were 293 patients; 152 females:141 males; mean age of 36 years. Age at initial diagnosis ranged from 1 to 75 years. 150 (51%) patients had SDHB, 120 (41%) SDHD, 14 (5%) SDHC and 9 (3%) with SDHA. The main referral pathway source was through genetics/endocrine (80%), vascular (8%), ENT (4%) and others (8%-GP and cardiology). Within the cohort 190 (65%) were asymptomatic carriers, 103 (35%) patients had paraganglioma, mainly SDHD (n=55) and SDHB (n=37). Anatomical distribution included head and neck: n=81 (2 metastatic), abdominal paraganglioma/phaeochromocytoma: n=20 (3 metastatic) and pelvic n=2.Two patients had renal cell carcinoma, 1 patient had acromegaly. Geographical distribution was drawn mainly from counties Antrim (n=143), Down (n=61) and Tyrone (n=37). 12 (4%) of patients had died at most recent follow up.

Conclusion: Patients with SDH in Northern Ireland are presenting in diverse ways. Given the rising burden of patients presenting with SDH, our results have implications for pathway and commissioning purposes.

OC.11 Inflammation observed in material debrided from diabetic foot ulcers is associated with lower likelihood of healing

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Early identification of people with diabetic foot ulcers (DFU) likely to have adverse outcomes is important. The aim of this study was to evaluate the potential of debrided material in the prediction of DFU outcome. Fifty-three consecutive people with DFU attending podiatry were recruited and underwent conventional DFU treatment including debridement. Debrided material was collected, processed, and examined histologically. Participants were categorised as healers (re-epithelialisation in </=12 weeks [n=27]) or non-healers (persisted for >12 weeks [n=26]). Tissue sections were scored for six histological parameters: presence of epithelial cells; percent volume of epithelium; hyperkeratosis; parakeratosis; fibrin; inflammation. Comparison was made between healers and non-healers in all wounds (AW, n=53) and non-infected wounds (NIW, n=29). No histological variable achieved statistically significance comparing healed and non-healed wounds in AW. However, greater volume of epithelium and less fibrin and inflammation were noted in healed compared to non-healed wounds in the NIW group. Principal component analysis (PCA) was used to reduce dimensionality and principal components (PC) used for logistic regression amongst AW and NIW. The AW model did not achieve statistical significance. However, the NIW model achieved statistical significance (ROC AUC 0.743, 95% CI 0.561-0.925, p=0.026). PCA identified a biological continuum with inflammation and fibrin associated with non-healing and epithelial cells present, percent volume of epithelium and hyperkeratosis associated with healing. These results suggest that the histological assessment of debrided material may help predict which ulcers are unlikely to heal and may facilitate more aggressive intervention in earlier stages.

OC.12 Can lumbar spine and hip DXA scans detect heterogenous bone density changes in patients with XLH over time?

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X-linked hypophosphataemia (XLH) is a rare disease characterised by FGF3 hormone-induced renal phosphate excretion. Complications include pseudo-/fractures and osteomalacia. The role of DXA in XLH is disputed. Lumbar spine (LS) DXA may show higher bone mineral density (BMD) due to spinal ligament ossification, while cortical bone thinning of lower limbs may be seen at hip. Disease progression may be reflected in both processes, with contradictory effects on BMD. This study aims to assess whether DXA scans can detect BMD change in XLH. Twenty XLH patients (65% female) had a median of four DXAs over time, mean age at most recent DXA was 38.65 (±13.58) years. An absolute least significant change (LSC) in BMD consecutive scans (LS = ±0.022g/cm2; hip ±0.028g/cm2) was observed in 85.4% and 61.8% in spine and hip scans per patient. Longitudinal changes in LS and hip BMD were analysed using linear mixed-effects models with patient-specific intercepts and time slopes. Mean LS BMD increased over time (0.0123 g/cm2/year, p = 0.0036), but with substantial between-patient variation (SD = 0.0128). Baseline LS BMD was not related to rate of change (correlation ≈ 0). Hip BMD showed no significant average change over time (-0.0026 g/cm2/year, p = 0.63). There was substantial heterogeneity in individual slopes (SD = 0.017), suggestive of higher baseline hip BMD associated with faster BMD decline. Further work will explore whether confounding variables, including medications, age, sex and menopause may influence our understanding of BMD rates of change in XLH and explain the variation observed.

OC.13 Predicting healing outcome of diabetes-related foot ulcers using autofluorescence of debrided ulcer tissue

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Diabetic foot ulcer (DFU) healing remains difficult to predict using current clinical assessment tools. Tissue autofluorescence reflects endogenous structural and metabolic fluorophores and may provide a biomarker of wound healing potential. Consecutive people with DFUs attending podiatry underwent conventional DFU treatment including debridement. Participants were categorised as healers (re-epithelialisation in </=12 weeks) or non-healers (persisting >12 weeks). Debrided material was processed (n=40, 20 healers and 20 non-healers) and underwent autofluorescence quantification of adjacent tissue sections one was chemically quenched, the other unquenched. Confocal laser microscopy (405nm excitation) was used to excite tissue sections and emission spectra across 32 wavelengths (421-723nm) was quantified. Spectral intensities were analysed by individual wavelengths, biologically defined wavelength bands and ROC analysis. Healers consistently demonstrated a trend towards higher autofluorescence intensities than non-healers across both quenched and non-quenched samples, although differences at individual wavelengths were not statistically significant. The greatest separation occurred within shorter and intermediate emission wavelengths associated with structural and metabolic fluorophores such as collagens, keratins, elastin, NAD(H), FAD. In the whole cohort, discriminatory performance was limited (AUC 0.598 non-quenched; 0.578 quenched). In non-infected wounds (n=17), non-quenched autofluorescence achieved good predictive performance (AUC 0.773, 95% CI 0.565–0.980; p=0.035). Non-healers demonstrated greater quenchable autofluorescence than healers, particularly at shorter wavelengths. We conclude that tissue autofluorescence demonstrates distinct spectral patterns associated with DFU healing in non-infected DFUs. Infection appears to mask intrinsic fluorescence signatures, while quenchable autofluorescence may represent a novel prognostic biomarker of DFU outcome.

Abstracts: Case Reports Oral Presentations

CR.1 Case Report - Rapid Progression of Diabetic Nephropathy to Antenatal Haemodialysis in Pregnancy

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Diabetic nephropathy in pregnancy is associated with high maternal and fetal risk, however rapid progression to end-stage kidney disease requiring dialysis is rare. We report a case of a 29-year-old multiparous woman living with type 1 diabetes for 20 years and probable underlying chronic kidney disease, who developed rapidly progressive renal failure during pregnancy. At 12 weeks' gestation, she presented with suboptimal glycaemic control (Time in Range 56%, HbA1c 72 mmol/mol), anaemia (Hb 74 g/L), proteinuria (PCR 100 mg/mmol), and impaired renal function (creatinine 145 µmol/L), consistent with advanced diabetic nephropathy. She had a history of diabetic retinopathy treated with laser therapy, was a current smoker, and demonstrated limited engagement with diabetes self-management. By 16–17 weeks' gestation, there was marked deterioration with worsening proteinuria (PCR 373 mg/mmol), rising creatinine (196 µmol/L), severe anaemia requiring red cell transfusion, erythropoiesis-stimulating therapy and IV iron transfusion, and new-onset hypertension. Despite intensive multidisciplinary management, renal function continued to decline. At 21 weeks' gestation, she developed fluid overload, hyperkalaemia, and further deterioration of renal function (creatinine 341 µmol/L), necessitating initiation of intermittent haemodialysis. Given ongoing maternal deterioration and guarded fetal prognosis, delivery by emergency caesarean section was performed at 28 weeks' gestation. Postpartum, the patient remained dialysis-dependent with ongoing renal replacement therapy. This case highlights the aggressive course of diabetic nephropathy in pregnancy, the potential for rapid transition to dialysis dependence, and the importance of early multidisciplinary care and timely counselling regarding maternal and fetal risks.

CR.2 Case Report - A case of hypercalcaemia in pregnancy due to CYP24A1 variants

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We present the case of a 35yo female who presented at 19 weeks gestation in her first pregnancy with fatigue, nausea and 12kg weight loss. History included anxiety and cervical polyps. Medications included folic acid and pregnancy supplements. She was not taking calcium or vitamin D. Family history was pertinent for kidney stones in her father. Biochemistry revealed corrected calcium 3.10mmol/L, PTH <1ng/L, creatinine 111µmol/L, phosphate 0.8mmol/L and 25-OH vitamin D 124nmol/L.

Investigations included a negative paraprotein screen, normal free kappa/lambda chain ratio 1.24 (<1.65), ACE 22U/L and PTHrP 1.1pmol/L. 1,25-dihydroxyvitamin D was elevated at 343pmol/L, with a 25-hydroxyvitamin D:24,25-dihydroxyvitamin D ratio of 128 (<80). A 24 hour urine collection showed hypercalciuria (14.7mmol/24hr). Imaging including US, CT and MRI found no evidence of malignancy, renal calculi or granulomatous disease. Genetic testing confirmed a diagnosis of infantile hypercalcaemia type 1. She carried a CYP24A1 pathogenic variant (p.Gln347*) in trans with a 717kb deletion. Management included intravenous fluids, low calcium diet and potassium supplementation with normalisation of calcium levels. She will be followed closely for the remainder of the pregnancy. Inactivating variants in CYP24A1 are rare and result in impaired vitamin D catabolism due to the inability of 24-hydroxylase to deactivate 1,25-dihydroxyvitamin D. Pregnancy is associated with an upregulation of 1,25-dihydroxyvitamin D and thus may trigger hypercalcaemia in affected patients. It is an important diagnosis to consider in the setting of hypercalcaemia presenting during pregnancy.

CR.3 Case Report- Atypical femoral fracture; A late diagnosis of Hypophosphatasia

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We describe the case of 69 year old lady being treated for osteoporosis with denosumab for 7 years prior to her index presentation. She suffered a mechanical fall. For 6 months prior to this event she had complained of bilateral thigh pain, she had been treated with atorvastatin for dyslipidaemia and had a trial of discontinuation with no improvement. Referrals were sent to neurology and rheumatology. She was admitted to hospital following this fall which revealed a subtrochanteric fracture of the right femur. A linear subchronic stress fracture in the left femur was also noted. Her laboratory workup was notable for low alkaline phosphatase level(18 IU/L, reference range 35 – 105 IU/L). Her alkaline phosphatase was noted to be persistently low (range 15-25 IU/L) for 10 years prior. The patient was referred to the metabolic bone service following her fracture and further workup revealed a significantly elevated pyridoxal phosphate 367 nmol/L (reference range 16-98 nmol/L), urine phosphoethanolamine 18.2 umol/mmol (reference range 5.4-10.5 umol/mmol) suggestive of metabolic bone disorder hypophosphatasia. Further testing revealed a mutation in the ALPL gene [NM_000478.6: c.1088_1091dup (p.Ser364fs)], consistent with autosomal dominant adult hypophosphatasia. Her denosumab discontinued as this along with bisphosphonates are contraindicated in this condition. The patient has four children and five grandchildren. Cascade screening revealed 50% of her offspring as having low alkaline phosphatase levels and testing positive on genetic screening for hypophosphatasia. One grandson, aged seven has also tested positive for hypophosphatasia.

CR.4 Case Report-A Rare and Challenging Case of Metastatic Parathyroid Carcinoma in a Young Male

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A 41-year-old male presented to the Acute Medical Unit with myalgia and fatigue. Blood testing revealed: Serum Corrected Calcium of 3.75mmol/L (2.17-2.51mmol/L), parathyroid hormone (PTH) of 500ng/L (15-65ng/L), an elevated Spot Urinary Calcium Excretion of 80µmol/L and a Calcium:Creatinine ratio of 0.71. He was initially managed with intravenous fluids, bisphosphonate therapy and Cinacalcet. Localising studies suggested a right, superior parathyroid adenoma and a left inferior parathyroid adenoma. Following Multidisciplinary Team (MDT) discussion, he progressed to surgery and had four-gland parathyroid exploration and left hemithyroidectomy. Post-operative histology revealed a pT3N1aM1 poorly differentiated parathyroid carcinoma with skeletal muscle and thyroid gland invasion. Staging CT and PET demonstrated cervical nodal involvement and pulmonary metastases. Onward MDT consensus was to target medical management of the hypercalcaemia. Unfortunately, his course was complicated by multiple admissions for hypercalcaemia management. Regular denosumab was added to his treatment regime. With the passage of time, renal impairment secondary to hypercalcaemia emerged along with radiological disease progression and more frequent hospitalisations for management of refractory symptomatic hypercalcaemia. The patient was thus commenced on Lenvatinib immunotherapy following further MDT discussion. This therapeutic trial initially failed due to significant psychological side effects of Lenvatinib. He subsequently developed end-stage renal disease and was commenced on renal replacement therapy two years following initial diagnosis; which now manages his hypercalcaemia. Parathyroid cancer is rare and reflects 0.005% of all cancers. It causes significant morbidity for patients due to severe hypercalcaemia. Limited treatment options are available for this condition.

CR.5 Case Report: Hybrid-Closed Loop Therapy in a Patient with Significant Visual Impairment and Complex Comorbidity Undergoing Liver Transplantation

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Hybrid Closed Loop (HCL) therapy is effective in achieving glycaemic targets and reducing recurrent severe hypoglycaemia in people with type 1 diabetes (T1D). Its use in decompensated liver disease and severe visual impairment has not, to our knowledge, been reported. A 27-year-old woman with T1D since childhood was referred to our service during an Intensive Care Unit (ICU) admission with severe hypoglycaemia and hepatic encephalopathy. Diabetes was complicated by recurrent admissions for diabetic ketoacidosis and severe hypoglycaemia. Comorbidities included autoimmune hepatitis-related cirrhosis, systemic lupus erythematosus, Addison's disease and chronic kidney disease. Decompensated liver disease, visual impairment and fluctuating insulin requirements made glycaemic management challenging. She was deemed unsuitable for combined liver-pancreas transplant following multidisciplinary discussion. Before HCL initiation, time in range (TIR) was 11% and time below range (TBR) 0%. Following structured education, she commenced HCL therapy (Medtronic 780G). Although initially unable to administer meal boluses, she achieved independent bolusing within weeks. Before orthotopic liver transplantation in October 2025, TIR improved to 65% with TBR remaining at 0%. Her post-transplant course was complicated by lupus nephritis, requiring high-dose methylprednisolone. Despite this, she remained on HCL therapy post-transplantation with no significant hyper or hypoglycaemic episodes. Since discharge, TIR exceeds 70%, with TBR <2% and no diabetes-related readmissions. This is, to our knowledge, the first reported case of successful HCL therapy in a patient with T1D, severe visual impairment and decompensated liver failure, demonstrating its effectiveness when supported by structured education in overcoming significant perceived barriers to access.

CR.6 Early-Onset Hypertension Due to Glucocorticoid-Remediable Aldosteronism: A Case Report and Family Cascade Screening

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Glucocorticoid-remediable aldosteronism (GRA), or Familial Hyperaldosteronism Type I, is a rare autosomal dominant disorder caused by a CYP11B1/CYP11B2 chimeric gene, resulting in ACTH-dependent aldosterone secretion, early-onset hypertension, and increased cardiovascular risk. A 16-year-old female presented to paediatric services aged 13 with blurred vision, severe headaches, and hypertension (165/120 mmHg). Ambulatory blood pressure monitoring confirmed persistent diastolic hypertension. Echocardiography, renal ultrasound, MRI brain, and MRI adrenal glands were normal. Biochemical investigations demonstrated hyperaldosteronism with an aldosterone level of 459 pg/mL, renin 2.4 pg/mL, and an aldosterone-to-renin ratio of 191.25. Hypokalaemia (3.4 mmol/L) with inappropriate renal potassium wasting (urinary potassium 79.7 mmol/L) was present. Urinary metanephrines were normal. Genetic testing identified a CYP11B1/CYP11B2 chimeric rearrangement, confirming GRA. Following transition to adult endocrinology services, she is managed with spironolactone 25 mg daily, with average home blood pressure readings of 130/90 mmHg. Cascade genetic testing identified the same pathogenic variant in her mother, maternal grandmother, and brother, all of whom were previously undiagnosed. GRA should be considered in young patients with severe or resistant hypertension, particularly when associated with hypokalaemia. This case highlights the value of genetic testing in confirming the diagnosis and facilitating cascade screening of at-risk relatives. Early identification of affected family members enables timely treatment and surveillance, with the potential to reduce long-term cardiovascular morbidity.

Poster Communications: Research, Audit and QI projects:

P1 Gestational Diabetes Mellitus as a Couple Experience: A Dyadic Qualitative Study

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Gestational Diabetes Mellitus (GDM) requires significant lifestyle and behavioural changes during pregnancy, including management through diet, physical activity and sometimes medication. Recent research highlights that partners play an important role in influencing these behaviours; however, care in GDM continues to focus primarily on the pregnant woman. This study explores how women with GDM and their partners experience and navigate GDM together, with a focus on both individual and shared experiences of management. Semi-structured interviews were conducted separately with 15 women diagnosed with GDM and their partners (15 dyads; 30 interviews in total), alongside three additional interviews with women whose partners did not participate. Data are being analysed using reflexive thematic analysis within a dyadic framework, enabling analysis of individual experiences alongside couple-level dynamics. Preliminary findings indicate considerable variation in how couples experience and manage GDM. Some couples viewed GDM as the woman's sole responsibility, whereas others described it as a shared endeavour, with partners actively contributing to dietary changes, monitoring routines, and decision-making. Many women expressed a desire for greater shared involvement, while partners reported feeling under-informed and excluded from healthcare consultations and decisions despite their active role at home. These findings suggest that GDM is experienced and managed within the couple context. Recognizing the couple, both within the care and home management contexts, rather than the individual alone, in GDM care may promote shared understanding, collaborative management, and improved psychosocial and clinical outcomes for women, partners, and their children.

P2 Patient-Reported Outcomes in a Tertiary Complex Bone Clinic: Insights into Disease Burden and Multisystem Impact

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Patient-reported outcome measures (PROMs) provide structured insight into the clinical impact of rare bone diseases, which are associated with significant morbidity including pain, functional limitation, and reduced quality of life. Conventional clinical assessments may not fully capture this multidimensional burden or patient-prioritised concerns. A prospective, ongoing service evaluation is being conducted in a tertiary complex bone clinic, where consecutive patients complete a structured PROM questionnaire prior to consultation. Data collected include pain severity, fracture history, treatment exposure, EuroQol 5-Dimension 5-Level (EQ-5D-5L) domains, and self-rated health (0–100), and are analysed using descriptive statistics to evaluate disease burden and functional impact. Findings are reviewed during consultations to identify patient priorities, support individualised decision-making at the consultation level, and inform ongoing service development and guide future service planning. Cumulative data from 51 patients (March–June 2026) are presented. The mean pain score was 4.1/10, with 32.7% reporting moderate-to-severe pain (≥6), indicating a substantial symptom burden. Fracture frequency was low (mean 0.28/year), although 17.6% reported at least one fracture in the previous 12 months. Functional limitations were evident, with 23% reporting severe or no mobility and 18% requiring help often or always with daily activities. Severe anxiety was reported in 11.5%. Multisystem involvement was prominent, with 46% reporting dental complications, 37% hearing problems, and 42% vision impairment, highlighting the need for coordinated multidisciplinary care. Mean self-rated health was 71/100.

P3 Differential Expression of Circulating miRNAs in Gestational Diabetes Mellitus: A Clinical Study in a Tertiary Irish Maternity Centre

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Gestational diabetes mellitus(GDM) diagnosis relies on the oral glucose tolerance test(OGTT), which is time-consuming and burdensome for patients. MicroRNAs(miRNAs) regulate gene expression and show promise as biomarkers for a single-sample GDM diagnostic approach. Candidate miRNAs(miR17-5p,miR330-3p,miR29a-3p and miR29b-3p), selected based on associations with β-cell dysfunction and glucose metabolism were investigated in pregnant women with GDM and compared with non-GDM pregnancies. Pregnant women(24–28 weeks' gestation) undergoing routine OGTT(n=130) at Cork University Maternity Hospital were recruited and classified as GDM positive(n=33) or GDM negative(n=97) according to IADPSG/HSE criteria, with additional assessment of HbA1c, thyroid function, vitamin D, and ALT to assess maternal metabolic and endocrine status. miRNA expression was quantified using RT-qPCR. Relative expression was calculated using 2^−ΔΔCt(Livak) method. Non-parametric statistical analysis was performed. No significant differences in miRNA expression between GDM and non-GDM groups($p>0.05$) was identified; trends were observed with miR17-5p and miR330-3p showing upregulation(fold changes:1.65 and 2.04 respectively) while miR29a-3p was downregulated(0.91fold) and miR29b-3p demonstrated minimal change(1.13fold) in GDM positive pregnancies. Higher ALT concentrations were associated with increased miR17-5p expression, while miR29b-3p expression was positively associated with FT4 and inversely associated with TSH concentrations($p<0.05$) in the GDM cohort. Although miRNA expression between groups was not significant. Significant associations with liver and thyroid function suggest that circulating miRNAs reflect metabolic and endocrine changes in GDM. This study provides novel Irish cohort data warranting validation in larger studies.

P4 Combined Treatment With Navepegritide and Lonapegsomatropin for Children With Achondroplasia: 52-Week Results from the Phase 2 COACH Trial

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Achondroplasia is a rare genetic condition characterized by disproportionate short stature. Treatment with navepegritide, a prodrug of C-type natriuretic peptide, increases growth vs placebo in children with achondroplasia. Adding lonapegsomatropin, a prodrug of somatropin, is hypothesized to augment endochondral bone formation. In the open-label phase 2 COACH trial (NCT06433557), children with achondroplasia aged 2-11 years received navepegritide (100 µg/kg/week) and lonapegsomatropin (starting at 0.30 mg hGH/kg/week). Treatment-naive (TN; n=12) children began both treatments on day 1; navepegritide-experienced (NE; n=9) children added lonapegsomatropin to navepegritide. The primary efficacy endpoint was annualized growth velocity (AGV) at Week 52 in TN children vs navepegritide monotherapy in the ApproaCH trial (NCT05598320) using ANCOVA with inverse probability treatment weighting. At Week 52, least squares mean AGV was 8.69 cm/year in TN children vs 5.95 cm/year for navepegritide alone in ApproaCH (difference [95% CI]: 2.74 [2.11–3.38] cm/year; $p<0.0001$). Mean increases from baseline in AGV and achondroplasia-specific height z-score were +3.89 cm/year ($p=0.0015$) and +1.02 ($p<0.0001$), respectively, in TN children, and +3.28 cm/year ($p<0.0001$) and +0.86 ($p<0.0001$), respectively, in NE children. AGV in both cohorts exceeded the 97th percentile for children of average stature. An improvement in body proportionality was observed at week 52. Arm span increased by 9.4 cm in TN children and 7.9 cm in NE children. Treatment was associated with a safety and tolerability profile similar to monotherapies. Longer term data will also be presented.

P5 Automated Insulin Delivery use during physical activity in people with Type 1 Diabetes

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Glucose control around Physical activity (PA) is challenging for people with Type 1 diabetes (T1DM). Automated Insulin Delivery (AID) systems offer a potential solution, but require specific management strategies to prevent dysglycaemia.We aimed to capture how individuals use AID systems around PA, and identify key challenges and knowledge gaps. T1DM patients attending TUH and using an AID system were given a semi-structured survey, including self-reported PA frequency, glucose management strategies and educational support. 34 participants completed the survey (22 Minimed 780G; 7 CamAPSFX; 5 Tandem T:slim). 32% reported exercising <3 times/week, thus failing to meet PA recommendations. 76% always / usually plan their PA. 41% remove their pump for certain /all activities, of whom only 57% suspend insulin delivery on pump removal. 75% of participants reported using a higher glucose target (HGT) during PA, but only 25% use it always. The majority activated HGT 30-60 minutes before exercise. 60% made no changes to bolus insulin doses around PA. 77% reported feeling "very confident" in managing hypoglycaemia and hyperglycaemia. However, 50% reported hypoglycaemia and 24% hyperglycaemia during PA. 80% would prefer to exercise without extra carbohydrate, but 74% needed carbohydrate to prevent or treat hypoglycaemia. 66% reported receiving education on PA with AID. Most (91%) would like further education, with 1:1 educational the favoured format. In Conclusion, glucose control around PA remains challenging for patients using AID systems. Additional education is needed to improve exercise planning, increase HGT use and reduce reliance on carbohydrate during exercise.

P6 Development of a National Virtual Ward Pathway for New Insulin-Requiring Diabetes

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Newly diagnosed diabetes requiring insulin frequently results in hospital admission for education, monitoring, and treatment optimisation, particularly outside standard working hours. Virtual ward models offer an alternative approach, enabling safe, structured care in the patient's home using remote monitoring technologies. We developed a national virtual ward pathway for adults with newly diagnosed diabetes requiring insulin therapy. Eligible patients are identified by the treating clinician following exclusion of diabetic ketoacidosis, hyperosmolar hyperglycaemic state, and other acute conditions necessitating inpatient care. Following medical assessment, patients are onboarded by virtual ward nurses who deliver structured education on insulin administration, continuous glucose monitoring, hypoglycaemia management, and use of remote monitoring technologies. Patients are monitored at home via the DOCLA virtual ward platform using standardised questionnaires and predefined escalation protocols. Ongoing support is provided by the virtual ward team until formal review by the diabetes inpatient service. Parallel development of comprehensive patient education resources and Continuing Professional Development (CPD)-accredited nursing modules aims to support workforce development, standardise care delivery, and enable scalable national implementation. The pathway is designed to improve patient experience, reduce avoidable hospital admissions, and shorten length of stay. Pilot implementation is planned at St Vincent's University Hospital in August 2026, with subsequent rollout to Wexford General Hospital and St Luke's General Hospital, Kilkenny. This pathway provides a national framework for safe insulin initiation outside the acute hospital setting and establishes the infrastructure for future evaluation of clinical outcomes, patient experience and healthcare utilisation.

P7 Reproductive Health Outcomes in Women Following Haematopoietic Stem Cell Transplantation: A Mixed Methods Study.

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Advances in cancer treatment have resulted in a growing population of long-term survivors, with increasing recognition of late-effects care. Female survivors of haematopoietic stem cell transplantation (HSCT) are at high risk of adverse reproductive outcomes. We evaluated reproductive health outcomes following HSCT in Ireland.Participants were identified from the national transplant database of women who underwent HSCT between 1984 and 2024. Of 252 eligible survivors, 167 were successfully contacted and 86 completed a reproductive health questionnaire. Quantitative data were analysed descriptively, and free-text responses underwent thematic analysis.Eighty-six women completed the questionnaire. Median age at HSCT was 24 years (IQR 19–30), median time from transplantation was 15 years (IQR 7–24.8). Premature ovarian insufficiency (POI)

was reported by 67/86 (77.9%), all women diagnosed with POI reported hormone replacement therapy use. Twenty-seven women (31.4%) reported pregnancy following HSCT, most commonly through donor egg IVF. Although 57/86 (66.3%) participants reported that the risk of menopause had been discussed before treatment, only 42/86 (48.8%) felt adequately informed regarding reproductive risks. Women transplanted within the previous decade were substantially more likely to report fertility and menopause counselling than those transplanted in earlier eras. Qualitative analysis identified ongoing unmet needs relating to fertility and long-term reproductive survivorship care.Female HSCT survivors experience a substantial burden of reproductive morbidity. Although pregnancy following HSCT is achievable, important gaps remain in counselling and survivorship care despite improvements in recent decades. These findings support the development of structured reproductive pathways in HSCT.

P8 The majority of people living with diabetes experience stigma: findings from a 30-day ecological momentary assessment study of adults with type 1 or type 2 diabetes

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Despite increasing recognition of diabetes stigma as an important challenge for individuals with diabetes, little is known about how it manifests in daily life. Ecological momentary assessment (EMA) methods allow us to examine diabetes stigma experiences in daily life. We aimed to measure stigma experience over a 30-day period in a diabetes population using EMA. A total of 90 adults with type 1 or type 2 diabetes completed a 30-day EMA study. Participants completed a 2-3-minute EMA once per day on a smartphone application. Daily assessments measured diabetes stigma, source of stigma, and coping strategies. For each participant, a percentage score was calculated representing the proportion of completed study days on which a stigmatising experience was reported. Seventy-nine percent (79%) of participants reported at least one experience of diabetes stigma during the study. Participants reported at least one diabetes stigma experience on 36% of completed EMA days, equivalent to approximately 11 days over the 30-day. Feeling not good enough (21%), guilty (17%), and shame (13%) because of diabetes were the most endorsed stigma experiences. The workplace was the most commonly reported source of stigma (27%), followed by public spaces (19%) and the home environment (19%). The most common daily coping responses were taking no action (35.7%), distraction (18%), and using humour (14%). These findings indicate that diabetes stigma is common and is a frequent aspect of daily life, often arising through internalised negative emotions. Addressing stigma as a psychosocial factor in routine diabetes care may be essential for improving well-being.

P9 Genetic variants in Transthyretin cause assay-dependent artefactual hyperthyroxinaemia and have implications for clinical care

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Recognition of assay interference is important to avoid misclassification of thyroid status. Genetic variants in transthyretin (TTR) can cause familial, discordant TFTs. Retrospective analysis of TFT data from 25 individuals with TTR variants, identified through rare thyroid disease services in UK and Ireland. FT4 was measured using at least one, one-step FT4 IA (Siemens Centaur n16, Siemens Atellica n8, Roche n6), and a two-step FT4 IA (DELFIA n25). Total T4 (n25), FT3 (n25) and TBG (n25) concentrations were also measured. Results were expressed as % above upper limit of the reference interval (ULRI). 17 males and 8 females (mean age 38.8 years; range 7–76 years) studied: three with known thyroid disease (hypothyroidism, MNG); others investigated for possible thyroid symptoms and found to have discordant TFTs. TTR variants included T139M (n16), A129T (n4), G26S (n4) and A139V (n1).Using DELFIA FT4 IA: 14/25 (56%) had elevated FT4, mean values 3% above ULRI. Using one-step FT4 IA: Roche 6/6 (100%; 32% above ULRI); Siemens Centaur 15/16 (94%; 16% above ULRI), and Siemens Atellica 6/8 (75%; 7% above ULRI). TT4 was elevated in 23/25 (92%), with mean values 20% above ULRI, while

FT3 was elevated in 9/25 (36%). All cases had TBG concentrations. TTR variants are associated with a characteristic, assay-dependent, pattern of interference, with greater FT4 elevation observed in one-step than two-step IA. Awareness of this pattern may facilitate recognition of TTR-related assay interference, preventing unnecessary investigation or treatment and enabling family member screening.

P10 Gonadectomy in Paediatric Differences of Sex Development: A 26-Year National Cohort Study of Clinical Practice and Incidence of Gonadoblastoma

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Gonadectomy remains a complex aspect of care for individuals with differences of sex development (DSD). Advances in genetic diagnosis, improved understanding of gonadal malignancy risk, and increasing emphasis on multidisciplinary shared decision-making have transformed clinical practice. Current data describing gonadectomy practice and gonadoblastoma incidence remain limited. We aimed to describe clinical characteristics of patients with DSD undergoing gonadectomy, evaluate historical and current practice, and determine the incidence of gonadoblastoma.A retrospective-prospective observational cohort study was conducted at Children's Health Ireland, the national referral centre for paediatric DSD, between 1999-2025. Patients were identified through clinical, genetic, and histopathology records, supplemented by prospectively collected Sex Development and Maturation (SDM) Registry data. Descriptive statistics summarised patient characteristics. Gonadoblastoma incidence was estimated with 95% confidence intervals. Groups were compared using the Mann–Whitney U test. Sixty-nine patients underwent gonadectomy; 54 (78%) females. Tumour risk reduction was the commonest indication (42/69, 60%). Females underwent gonadectomy at an older age than males (median 10.3 years [IQR 2-16] vs 3.0 years [IQR 1.6–3.8]; p=0.017). Among 66 patients with Y chromosome material, gonadoblastoma occurred in 21 (31.8%) (95% CI: 20.9–44.4%), most commonly in mixed gonadal dysgenesis (n=9) and complete gonadal dysgenesis (CGD) (n=7). Concurrent dysgerminoma occurred in three patients with CGD. Most tumours were intra-abdominal (18/21, 86%).This national cohort demonstrates that tumour risk reduction is the predominant indication for paediatric gonadectomy in DSD. The high incidence of gonadoblastoma supports multidisciplinary risk assessment and individualised shared decision-making regarding prophylactic gonadectomy.

P11 A prospective cross-sectional study to evaluate if hypopituitarism is associated with diminished health-related quality of life in adult brain tumour survivors

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Optimising health-related quality of life (HR-QOL) in non-pituitary brain tumour survivors is a key clinical priority. Whether radiotherapy-induced hypopituitarism contributes to impaired HR-QOL and thus represents a therapeutic target remains uncertain. This study aimed to evaluate HR-QOL in radiotherapy-treated survivors and determine if hypopituitarism is associated with impaired HR-QOL. A prospective cross-sectional study of radiotherapy-treated brain tumour survivors was conducted at Beaumont Hospital with research ethics approval. Pituitary function was evaluated using a glucagon stimulation test and pituitary profile. HR-QOL was assessed using the Short Form-36, FACIT-F, HADS, WHODAS-V2, and AGHDA scales. Scores were compared with normative populations and between survivors with and without hypopituitarism using Mann-Whitney U tests. Sixty-six brain tumour survivors were recruited (47% female, mean age 46.7±12years), 61 months (IQR 37-91) following radiotherapy completion. Thirty-one participants (47%) had normal pituitary function while 35 (53%) had hypopituitarism. Pituitary hormone deficits included GH (n=35), gonadotropin (n=3), ACTH (n=2), and TSH (n=1). Survivors demonstrated significantly diminished HR-QOL across all assessment subdomains compared with normative populations. No differences in HR-QOL were observed between survivors with and without hypopituitarism, except for HADS anxiety scores, which were paradoxically higher in patients with intact pituitary function (4.5 [IQR 2.0-8.0] vs. 8.5 [3.0–13.0], p=0.03). HR-QOL did not differ significantly between survivors with hypopituitarism (predominately GH deficiency) and

those with intact pituitary function, suggesting impaired HR-QOL is primarily related to the underlying tumour and treatment. Consequently, widespread GH replacement is unlikely to substantially improve HR-QOL in this population.

P12 Investigating candidate variants in genes associated with hypogonadotropic hypogonadism in a Genomics England cohort

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Congenital hypogonadotropic hypogonadism (HH) is a rare disorder characterised by hypothalamic-pituitary-gonadal axis dysfunction. Numerous implicated genes have been identified comprising a 28-gene panel available for diagnostic testing in the UK (R148). However, the genetic aetiology for approximately half of patients remains unknown. This study aims to identify HH participants within the Genomics England (GE) database without a genetic diagnosis by panel testing, and to investigate their genomic data for potentially pathogenic variants. From the GE cohort, 177 HH participants were identified. Those with causal variants were excluded (n=23). Genomic data were analysed using Exomiser to investigate variants in R148 panel genes (n=28) and additional congenital HH-related genes based on literature review (n=166). Preliminary analyses identified 78 candidate variants defined by ACMG criteria (pathogenic(P) (n=3), likely pathogenic(LP) (n=5), variant of uncertain significant(VUS) (n=70)), among 75 participants, none of which were previously labelled as potential causal variants. Within the R148 panel, 10 variants were identified: LP (FGFR1: n=1), VUS (n=9). Within additional congenital HH-related genes, 68 variants (3 P (DMXL2: n=2; SCL40A: n=1), 4 LP (n=1: DMXL2, POU6F2, RELN, ROBO3), 61 VUS) were identified. This study underscores the expanding landscape surrounding congenital HH and its genetic aetiology. While existing gene panels are helpful in confirming a diagnosis in known causal variants, they are by no means exhaustive. Furthermore, epigenetic factors, oligogenic inheritance, and gene-environment interactions likely play a role in its aetiology, highlighting areas requiring additional research.

P13 Results of a healthcare support service project assessing the management of type 2 diabetes in general practitioner practices

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Introduction/Background: The prevalence of type 2 (T2DM) diabetes mellitus in Ireland is ~6% and has risen in recent years. Healthcare support service (HSS) programs enable general practitioner (GP) practices to undergo third-party clinical audits of electronic health records (EHRs) to identify gaps in diagnosis and management of chronic diseases, including T2DM. Materials and methods: We conducted a cross-sectional assessment of T2DM populations in 15 GP practices between September 2025 and March 2026 via HSS provider Screen Clinical®. EHRs were queried to identify adults (≥18 years) with diagnostic codes for T2DM. Extracted data included demographics, coded comorbidities, laboratory values, vital signs, and prescribed medications for diabetes and concomitant conditions. Descriptive statistics summarized findings. Results: Of 124066 patient records screened, 4529 (3.7%) had T2DM codes. Among these, 72% (3260) had a recorded HbA1c within the prior 12 months; 28% (1298) had HbA1c ≤48 mmol/mol. The most prescribed glucose-lowering therapies were metformin (52%), SGLT2 inhibitors (30%), and GLP-1 agonists (19%); ~8% received insulin. Cardiovascular-renal protective medications included statins (49%) and renin-angiotensin-aldosterone system (RAAS) inhibitors (40%). Frequently coded comorbidities were hypertension (31%) and atherosclerotic cardiovascular disease (ASCVD; 17.6%). In high-risk subgroups (ASCVD, chronic kidney disease, or heart failure), use of guideline-directed cardiometabolic therapies (statins, RAAS inhibitors, SGLT2 inhibitors) was <70% across indications. Conclusions: This audit suggests suboptimal alignment with guideline-directed care, notably in use of recommended cardiometabolic therapies and HbA1c recording frequency. While subject to coding and misclassification errors, these findings support targeted quality improvement through awareness, education, and protocolized care pathways.

P14 Preconception knowledge of women with diabetes

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Estimates suggest that 1 of every 250 pregnancies occur in women with pre-existing diabetes. Pre-pregnancy planning has been shown to help mitigate risks associated with diabetes in pregnancy. However many studies suggest the majority of women with pre-gestational diabetes do not attend pre-pregnancy planning. The aim of this study was to assess pre-pregnancy planning knowledge of women with pre-gestational diabetes to develop a service appropriate for their needs. We adapted a questionnaire developed by the National Diabetes Screening Service in Australia for use in an Irish population and offered the survey to women of childbearing age with pre-existing diabetes who attend diabetes clinics in Cork University Hospital and local primary care practices. 36 women have participated in this survey to-date, (median age 30 years). The majority, N=27, have type 1 diabetes mellitus. 26 had spoken to a healthcare professional about diabetes and pregnancy and 24 had these conversations initiated by the healthcare professional. The main areas of uncertainty in preconception knowledge related to folic acid dosage, the effect of hyperglycaemia on the risk of miscarriage and recommendations on breastfeeding. 28 women indicated that they would discuss pregnancy plans with a healthcare professional preconception in the future with the majority, n=19, keen to discuss this with their endocrinologist. Areas where further information was desired included diabetes and fertility, optimising diabetes pre and during pregnancy and risks and complications. By understanding current knowledge gaps, we hope to focus our education delivery to improve outcomes for women at risk.

P15 Prevalence of discordant thyroid function tests in primary care and outpatient settings in a large teaching hospital

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Hypothyroxinaemia (low free T4 [fT4]) with a preserved thyroid-stimulating hormone (TSH) within the reference interval (RI) is a discordant pattern that can represent significant endocrine pathology, medication effects, and non-thyroidal illness. Guidance on clinical evaluation and investigation outside specialist endocrinology settings remains limited. We reviewed thyroid function tests (TFTs) performed in our clinical biochemistry laboratory between November 2023 and October 2024 with discordant results (fT4 <10nmol/L and TSH within the RI [0.3-4.20mU/L]) from general practice (GP) and outpatient department (OPD) sources. Total T4 was reflexively added in all such cases. Electronic health records were reviewed to identify potential causes and subsequent referral to endocrinology OPD. During this period, 146,208 GP TFTs were requested for 119,264 patients. Discordant results occurred in 299 tests (0.2%), representing 257 individuals. Low total T4 was present in 56.5% of these results and 11 patients (4.3%) were referred to endocrinology for further assessment. Among outpatients, 21,920 TFTs were requested for 7,417 patients. Discordant results occurred in 95 tests (0.4%), representing 78 individuals. Low total T4 was present in 51.6% of these results and 31 patients (39.7%) were reviewed in endocrinology clinics. Across both cohorts, 43.3% of patients had an identifiable underlying cause. These included hypothalamic, pituitary, and thyroid disorders, medication effects, non-thyroidal illness, and assay interference. Discordant TFTs are an uncommon but clinically relevant finding. Clear guidance on investigation, interpretation and referral of these results would support both primary and secondary care clinicians and facilitate identification of significant endocrine pathology.

P16 A Service Evaluation of the clinical management of Cystic Fibrosis Related Diabetes

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The current clinical management of metabolic outcomes of CFRD across Ireland, on the association between CFTR modulators and metabolic health. Cystic fibrosis (CF) related diabetes (CFRD) is the most common extra pulmonary consequence of CF phenotype and contributes to morbidity and mortality. Insulin remains the recommended treatment, the existing management guidelines predates the widespread uptake and success of CFTR modulator therapies, which have revolutionised the clinical landscape of CF. A multi-centred retrospective service evaluation was conducted using routinely collected clinical data from CUH, SVUH and UHG. 190 people with CFRD were included. Variables included patient demographics, CFTR modulator therapy use, comorbidities, CFRD management, clinic attendance, metabolic health markers. Among the 190 patients 86% were on CFTR modulators. In 164 patients with pre and post modulator data, CFTR modulator use initiation was associated with significant increase in Hba1c, weight and BMI, with the median changes of +8mmol/L, +5.5kg, and 1.9 kg/m^2 respectively across two centres. Longitudinal analysis across three clinic visits also demonstrates progressive increase in both HBA1C and BMI overtime. Endocrine clinical attendance rates were recorded at 35%. GLP1-receptor agonist was recorded in 5 patients thus far. The clinical landscape of CFRD has drastically changed in the last decade, influenced by the widespread use of CFTR modulator use, we are now seeing rising BMI's and worsening glycaemic control. These findings highlight that the traditional management of insulin and focus on gaining and maintaining weight is no longer adequate to address the evolving metabolic characteistics of CFRD.

P17 Real-World Glycaemic Outcomes of Hybrid Closed-Loop Insulin Pump Therapy: A Retrospective Analysis from Beaumont Hospital

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Hybrid closed-loop (HCL) insulin pump therapy has transformed the management of type 1 diabetes mellitus. We evaluated real-world outcomes in a tertiary diabetes technology service. A retrospective review of adults receiving HCL therapy at Beaumont Hospital was performed using Cellma, MedLIS, Glooko, Medtronic CareLink and Dexcom Clarity. Demographic characteristics, HbA1c and continuous glucose monitoring (CGM) metrics were analysed. Medtronic and Tandem outcomes were compared using Welch's t-test. A total of 381 adults were included (179 men, 202 women). Mean BMI was 27.6 kg/m² and diabetes duration 27.2 years. Medtronic MiniMed 780G was used by 311 (81.6%) individuals, Tandem t:slim with Control-IQ by 62 (16.3%) and Ypsomed by 5 (1.3%). Mean HbA1c improved from 64.1 to 56.4 mmol/mol following HCL initiation ($p<0.001$). Medtronic users achieved significantly higher mean TIR than Tandem users (72.7 ± 12.1% vs 61.8 ± 18.1%; $p<0.001$) and lower mean GMI (6.92 ± 0.43% vs 7.31 ± 0.59%; $p<0.001$). Overall, 68.7%, 22.9% and 60.0% of Medtronic, Tandem and Ypsomed users achieved TIR ≥70%, while 45.5%, 43.6% and 40.0%, respectively, achieved HbA1c ≤53 mmol/mol. HCL therapy significantly improved glycaemic control in this large real-world cohort. These findings provide benchmark data for diabetes technology services in Ireland and support the use of CGM metrics alongside HbA1c when evaluating HCL systems.

P18 Mind the Gap: Assessing insulin prescribing knowledge among doctors in Mayo University Hospital (MUH)

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Insulin prescribing errors are the fourth most common medication errors and insulin is labelled as high risk by The Irish State Claims Agency.(1) We aim to assess the gap in knowledge among MUH doctors for future teaching. A short 10-question quiz was circulated to consultants and NCHDs via Microsoft Forms in June 2026. Anonymous responses collected over one week. Specialties included medicine, surgery, obstetrics, psychiatry and emergency. We assessed knowledge of insulins, adjusting doses, management of hyperglycaemia on insulin and intravenous (IV) to subcutaneous (SC) insulin conversion. The quiz was circulated to approximately 150 doctors, the response rate 23% (n=34). Respondents comprised medicine (85%, n=29), followed by obstetrics and emergency (12% combined, n=4) psychiatry (3%, n=1). NCHDs responses were 82%. Recognition of long-acting insulins was good (Levemir 68%, Toujeo 65%, Tresiba 65%, Lantus 85%). 67% (n=23) managed overnight fasting hyperglycaemia correctly. Humulin I/Fiasp were mistaken as long-acting by 56% (n=19). Recognition of short-acting insulins varied (Novorapid 91%, Actrapid 79%, Fiasp 41%, Humalog 23%). While 79% of respondents recognised NovoMix 30, only 53% correctly adjusted dosing. 68% of participants converted IV to SC insulin appropriately. The recognition of long-acting and premixed insulins was good; prescribing principles were inconsistent. Short-acting insulins beyond Actrapid and

Novorapid were not well recognised. A dedicated insulin teaching session should be scheduled every quarter, particularly focusing on NCHD changeovers.

P19 Improving access to psychology support for people living with diabetes in Ireland

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Although diabetes is associated with significant psychological burden, including distress, anxiety, depression, stigma, and burnout, access to specialist psychology services in Ireland remains limited as highlighted in the Department of Health's Diabetes Policy and Services Review. To address this need, Diabetes Ireland developed three group-based psychoeducational programmes supporting emotional wellbeing: COPE (Connect, Overcome, Prioritise and Empower); T1DREAMS (Type 1 Diabetes Resilience, Emotional and Mental Health Support); CARE (Community and Resilience for Every Type 1 Diabetes Parent). COPE is a four-week online programme for adults with type 2 diabetes. Pilot evaluation data from 52 participants across five programme cycles showed: significant improvements in diabetes empowerment ($p<0.001$), quality of life ($p=0.028$), mental wellbeing ($p<0.001$); reductions in depression ($p=0.004$), anxiety ($p=0.019$), diabetes-related distress ($p<0.001$) and self-reported health burden ($p=0.031$). Self-compassion increased significantly ($p=0.010$), while diabetes-related stigma decreased post-programme ($p=0.025$). Social connection and personal change emerged as key participant themes. T1DREAMS offers support for adults with type 1 diabetes diagnosed with type 1 diabetes within 3 years through three online group sessions and e-learning modules incorporating psychoeducation, coping strategies, relaxation, reflection, and peer support. CARE is a two-session online peer support programme for guardians/parents, which provides coping strategies tools, relaxation and psychoeducation, offering parents a safe space to care for their own wellbeing. Formal evaluation of T1DREAMS and CARE is ongoing. Together, these programmes represent a scalable approach to addressing unmet psychosocial needs and delivering more person-centred diabetes care across the lifespan.

P20 Pregnancy in Women with Established Primary Hyperparathyroidism: A 10-Year Single-Centre Experience

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Primary hyperparathyroidism (PHPT) in pregnancy is rare but carries significant maternal and fetal morbidity. Most published series describe women diagnosed during pregnancy. We describe a distinct, underreported population of women entering pregnancy with established but untreated PHPT. We performed a retrospective review of all PHPT-related hypercalcaemia managed at a tertiary maternity centre between 2015 and 2025. Eight pregnancies in six women (mean age 36 years) were identified. All had pre-existing PHPT (five sporadic adenomas, one MEN1); one had previously undergone unsuccessful parathyroidectomy. Mean peak corrected and ionised calcium were 2.81 mmol/L (SD 0.20) and 1.44 mmol/L (SD 0.08), respectively. Renal complications predominated. Of two women with pre-existing nephrolithiasis, one developed hypercalcaemic crisis requiring ICU admission and second-trimester parathyroidectomy, while the other developed bilateral ureteric obstruction requiring stenting and prolonged hospitalisation. A third woman developed de novo nephrolithiasis in the first trimester. Six pregnancies were managed conservatively; two required second-trimester parathyroidectomy. Four pregnancies required intravenous hydration. Ionised calcium identified hypercalcaemia more frequently than corrected calcium (90% vs 79% of paired measurements; $r=0.77$). One neonate developed transient hypocalcaemia; there were no fetal losses. Women entering pregnancy with established PHPT, particularly those with pre-existing nephrolithiasis, are at high risk of severe maternal morbidity. Ionised calcium more reliably detected hypercalcaemia than corrected calcium and may be the preferred monitoring parameter. Preconception counselling, renal ultrasound to screen for nephrolithiasis, and monitoring of urinary calcium excretion (which rises physiologically in pregnancy) should be incorporated into the management of pregnant women with PHPT.

P21 High levels of Frailty in People in Remission from Diabetes-related Foot Ulcers

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People with diabetes-related foot ulceration experience adverse health outcomes. During active ulceration, individuals are often advised to reduce activity levels, which may increase the risk of frailty and contribute to poorer health outcomes, including reduced functional independence. We aimed to review frailty among individuals in remission from diabetes-related foot ulceration, defined as a person with diabetes and a healed foot ulcer. We reviewed clinical data of individuals attending podiatry at Clonskeagh Integrated Care Hub. Frailty was assessed using the FRAIL scale, with scores of 1–2 indicating pre-frailty and 3–5 indicating frailty. Additional assessments included the Timed Up and Go (TUG) test, with >13.5 seconds indicating increased falls risk, and hand grip strength (HGS), measured using a Jamar dynamometer, with low grip strength defined as <27 kg in men and <16 kg in women. Baseline clinical characteristics included age, sex, diabetes type and glycated haemoglobin (HbA1c). A total of 59 individuals were included, with a median (IQR) age of 66 (60–78) years; 22% were female, 88% had type 2 diabetes and median HbA1c was 58 (52–71) mmol/mol. Based on the FRAIL scale, 32% were frail and 37% were pre-frail. Reduced HGS was observed in 25% of women and 28% of men. One-third of participants had a TUG time >13.5 seconds, indicating increased falls risk. These are the first data describing frailty in individuals in remission from diabetes-related foot ulceration. Frailty and pre-frailty were prevalent, highlighting the need for research and targeted rehabilitation strategies in this population.

P22 Growing Up in the Age of Artificial Intelligence: Transforming the Management of Puberty and Growth

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Artificial intelligence (AI) in paediatric endocrinology lends itself to enhanced patient care in the areas of puberty and growth, as highlighted by our recent review of the literature. Facial recognition software utilising machine learning (ML) can identify subtle dysmorphic features of Turner, Noonan, and Cushing syndrome. Interestingly, novel deep learning techniques can diagnose congenital adrenal hyperplasia using facial images with high sensitivity and specificity, focusing particularly on nose and upper facial features. In the diagnosis of central precocious puberty (CPP), ML approaches using basal biochemistry (LH, IGF-1, and FSH) concentrations predicted CPP with an area under the curve of 0.9, bypassing the need for GnRH stimulation testing. Finnish population-based height screening utilises AI algorithms embedded within electronic patient records for early recognition of growth anomalies, facilitating earlier specialist referral. Furthermore, data from longitudinal paediatric cohorts are used to train ML algorithms to predict final height with an accuracy of 90%, as well as to predict the response of patients with Turner syndrome to recombinant growth hormone. ML has also been shown to differentiate arginine vasopressin deficiency from primary polydipsia in 87% of patients, thus circumventing traditional intensive dynamic testing. Despite its potential benefits, the integration of AI presents several challenges such as data privacy concerns, clinical validation in age-specific populations, and the mitigation of algorithmic bias. While AI offers improvement in management pathways in paediatric endocrinology, the challenges posed in its implementation currently limit it to a complimentary tool, rather than a replacement for clinical evaluation and judgement.

P23 Quantity Over Quality? A Hospital-Wide Service Review of of Point-of-Care Ketone Meter Quality Control Activity

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Point-of-care (POC) ketone quality control (QC) testing, which requires two ketone strips (€2.21 per strip) per instrument, is mandatory within 24 hours of patient testing. In 2025, across our institution, QC alone accounted for 54,163 tests at a cost of €119,700, while total expenditure for ketone testing was €189,662. We aimed to measure QC activity and instrument utilisation, and identify areas of resource waste. A prospective hospital-wide review of POC instrument activity was conducted over 17 non-consecutive days. Data was collected on the number of patient and QC tests performed. QC/patient test ratios were calculated for each instrument to identify those generating disproportionate QC activity relative to patient testing. During

the review period, 2,706 QC tests and 1,517 patient tests were performed (average 1.8 QC tests/patient test). 134 instruments were utilised (average 2/clinical location). Only 47% (63/134) of POC instruments achieved a QC/patient test ratio < 2, indicating at least 1 patient tested after a full QC. 55% (1,491/2,706) of QC tests were conducted on instruments not subsequently utilised for patient testing. Modelling a reduction to one instrument per clinical location reduced QC testing by 39.7%, saving approximately €50,819 annually. These findings suggest that excessive QC testing, driven by the widespread availability of low-utilisation instruments, is the primary cause of ketone strip overconsumption. Rationalising availability and deployment of ketone-enabled POC instruments could significantly reduce waste and expenditure without compromising patient access to POC ketone testing.

P24 General knowledge and attitudes of partners, friends and/or immediate relatives of adults with Type 1 Diabetes regarding hypoglycaemia recognition and treatment

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Hypoglycaemia, defined as a glucose below 4.0 mmol/L, is a potentially life-threatening condition which can result in seizures, loss of consciousness and death. While most individuals with Type 1 Diabetes Mellitus (T1DM) can treat hypoglycaemia independently, responsibility falls on close contacts if they become impaired. Despite their critical role, there is currently limited research into the knowledge and preparedness of such populations in recognising symptoms, confirming hypoglycaemia by testing or treating hypoglycaemic episodes. This study addresses the role of close contacts in the early recognition and management of hypoglycaemia. This cross-sectional study involved 107 adults with T1DM attending Diabetes outpatient clinics and 93 of their close contacts. Individuals were invited to participate via a questionnaire with implied consent obtained through circulation. Demographic data was also collected from medical charts with consent. Data was analysed using SPSS v31 with descriptive and comparative statistical methods. Results indicate significant differences in knowledge based on time spent with the person with diabetes, including understanding of glucose sensors ($p=0.004$) and blood glucose monitors ($p=0.038$). The relationship also influenced their ability to recognise hypoglycaemic symptoms, recognise causes of hypoglycaemia ($p=0.004$) in addition to reading glucose monitors/sensors ($p<0.001$, $p=0.019$) and use a glucagon injection ($p= 0.003$). Close contacts play a vital role in recognising and managing hypoglycaemia, but knowledge gaps exist that may delay intervention. Findings highlight the need for targeted educational programs to enhance preparedness among family and friends, ultimately reducing risks of hypoglycaemia in people living with T1DM.

P25 Bariatric Surgery and Progression to Renal Transplant Listing in Patients with End-Stage Renal Disease and Obesity: A Single-Centre Experience

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Complex obesity is a barrier to renal transplantation in some patients with end-stage renal disease (ESRD), with many transplant programmes applying body mass index (BMI) thresholds for eligibility. Bariatric surgery may improve access to transplantation. We evaluated weight-loss outcomes and transplant listing following bariatric surgery in patients with ESRD. We performed a retrospective observational study of adults with ESRD who underwent bariatric surgery at a tertiary referral centre. Clinical and demographic data, postoperative weight-loss outcomes, and transplant listing status were reviewed. Eleven patients underwent bariatric surgery (54.5% female), mean age was 46.5 ±5.3 years, baseline BMI was 51.4 ± 11.1 kg/m², and baseline weight was 147.7 ± 36.7 kg. Procedures included sleeve gastrectomy (54.5%), Roux-en-Y gastric bypass (36.4%), and one-anastomosis gastric bypass (9.1%). There were no perioperative deaths or major complications. Among patients with two-year follow-up (n=6), mean BMI decreased to 37.2 ±11.9 kg/m² with a mean percentage total weight loss of 32.8 ± 10.6%. Four patients (36.4%) were listed for transplantation, while four remained within two years of surgery and under ongoing transplant assessment. One patient had not reached the BMI threshold for listing, one was ineligible because of non-weight-related contraindications, outcome data were unavailable for one patient. Bariatric surgery achieved clinically meaningful weight loss in patients with ESRD and obesity and was associated with progression to kidney transplant listing in over one-third of patients, with a further proportion undergoing ongoing postoperative assessment. These findings support bariatric surgery as a potential bridge to transplantation in appropriately selected patients.

P26 Early Safety and Biochemical Outcomes of Feminising Gender-Affirming Hormone Therapy: A Real-World Multicentre Cohort Study.

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Background: Real-world data describing prescribing practices, biochemical outcomes and early safety of feminising gender-affirming hormone therapy (GAHT) remain limited. We evaluated prescribing patterns, biochemical outcomes and early adverse effects in individuals commencing feminising GAHT within a multicentre clinical service. Methods: A retrospective cohort study was conducted of individuals with gender incongruence who commenced feminising GAHT through Gender-Plus Hormone Clinics between November 2023 and March 2026. Demographic, biochemical, treatment and adverse-effect data were collected at baseline and first follow-up reviews. Continuous and categorical variables were compared using t-tests and Chi-square tests. Results: A total of 321 patients (mean age 23.5years) were included. Prescribing practices were similar between centres, with over 95% prescribed combined GnRH analogue and oestradiol therapy. Regional variation was observed in oestradiol formulation, with greater use of transdermal gel in Dublin and greater use of alternative formulations in England. Mean testosterone concentrations decreased from 17.89 to 2.05nmol/L, while mean oestradiol concentrations increased from 128.5 to 362pmol/L at first follow-up. Follow-up oestradiol concentrations were higher in Dublin than England (338 vs 223pmol/L), although testosterone suppression and adverse-effect rates were similar. Overall, 290 patients (90%) reported no adverse effects. Patients reporting vasomotor symptoms had lower follow-up oestradiol concentrations than those without adverse effects (171.0±105.8 vs 262.7±291.4pmol/L, p=0.010). Conclusions: Feminising GAHT was associated with effective testosterone suppression and excellent early tolerability. Despite regional differences in oestradiol formulation, biochemical outcomes were comparable between Irish and UK clinics. Lower achieved oestradiol concentrations were associated with vasomotor symptoms.

P27 Clinical practice review of type 1 diabetes patients in Galway University Hospital

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The American Diabetes Association produce a standards of care guideline, and the European Society of Cardiology (ESC) published a 2025 focused update that provides guidance on the management of dyslipidaemia. A review of patients with T1DM was undertaken. 937 patients. 603 patients had HbA1c above guideline target of 53 mmol/mol. 304 patient were classified as overweight BMI 25-29.9, 158 patients were classified as Obese class 1 (BMI 30-34.9), 54 patients were classified as Obese class 2 (BMI 35-39.9), and 20 patients as Obese class 3 (BMI >40). Using a subgroup of 150/937 patients, when applying the ESC criteria, 116/150 patients (77%) patients were classified as very high risk. Only 15 of these patients had LDL cholesterol levels at target and 43 were not prescribed any lipid lowering therapy. 27/150 patients (18%) were classified as high risk, 20 of whom did not have LDL cholesterol at target and 13 of whom were not prescribed lipid lowering therapy. 41/150 (27%) of patients were not prescribed a statin despite being eligible due to being over 40 years of age alone. Review of hypoglycaemia not documented in 53/150 (35%) of patients most recent clinic letter. For continuous glucose monitoring 28/150 patients had time in range above the recommended target >70%, 76/150 patients having time above range outside recommended target of <30%. NT-proBNP levels were measured in just 170/937 (18%) of patients. There is dire need to ensure there is greater awareness of best practice guidelines.

P28 Cost Minimisation Analysis of Tirzepatide to Achieve Body Mass Index for Renal Transplantation in Patients Receiving Hospital Haemodialysis in a Tertiary Centre

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A body mass index (BMI) threshold of >32 kg/m² represents a potentially modifiable barrier to renal transplantation in Ireland. Tirzepatide, a dual glucose-dependent insulinotropic polypeptide and glucagon-like peptide-1 receptor agonist, has demonstrated superior weight reduction compared with other available pharmacological therapies. We undertook a deterministic cohort cost minimisation analysis comparing tirzepatide-assisted weight reduction followed by renal

transplantation versus continued hospital haemodialysis in patients ineligible for renal transplantation due to BMI >32kg/m^2. Ten patients in a tertiary centre audit were identified in whom elevated BMI was the only contraindication to transplant listing. Cost data for hospital haemodialysis, dialysis-related complications, tirzepatide therapy, transplantation and post-transplant follow-up were obtained from the National Renal Transplant Registry, Irish Kidney Association reports and the National Centre for Pharmacoeconomics. Weight loss associated with tirzepatide was derived from published clinical trial data and applied to baseline BMI to estimate time to achieve BMI below 32 kg/m². A 10-year timeframe was used with no discounting applied. Once transplant eligibility was achieved, cost savings were projected from within one year post-transplant (€70,500–180,500 per patient). Projected annual savings per patient were €420,371 at five years and €945,036 at ten years post-transplantation. While renal transplantation has long been established to have significant cost savings, this analysis shows that using tirzepatide in the preparatory phase of transplantation is projected to deliver similar substantial cost savings. These data support the economic argument for use of tirzepatide in a select pre-transplant population.

P29 Gaps in implementation of guidelines for the treatment of diabetes and chronic kidney disease: a retrospective audit from a model 3 public acute hospital

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Background and aims: Accurate review and implementation of latest guidelines in treatment plan for patients with diabetes and chronic kidney disease (CKD) can improve patient outcomes and reduce therapeutic inertia. Current guidelines recommend multifactorial risk reduction including optimisation of glycaemia, blood pressure (BP), lipids and the use of cardiorenal protective therapies. However, real-world adherence to these recommendations remains uncertain. Materials and methods: A retrospective audit was conducted in the Low Clearance Clinic and Dialysis Centre, Cavan General Hospital. Of 361 randomly selected patients with CKD (Stages 3a–5), 130 with diabetes were included. Clinical characteristics, laboratory data, pharmacotherapy over two-year period were assessed against 2022 international guideline recommendations (2022 ADA/EASD and ADA/KDIGO). Results: Most participants (53%) were >75 years, male (70%), with T2DM - 97.7%. The cardiovascular disease burden was substantial: 45% had ASCVD and 24% HF. Glycaemic targets were achieved in 75%, only 30% met BP<130/80 mmHg. Lipid control was suboptimal: only 22% achieved LDL-c <1.4 mmol/L with ASCVD, without 28%. Statin underuse was evident, with 34% of primary, 10% of secondary prevention patients untreated. Inappropriate metformin prescribing occurred with eGFR<30 mL/min/1.73 m². Among eligible patients, 73% were prescribed SGLT2i, 27% received GLP-1ra; 25% - without. Half of insulin-treated patients with T2DM were on insulin monotherapy. Conclusion: Important gaps remain in BP and lipid management and the use of cardiorenal protective therapies despite good glycaemic control. Greater implementation of guideline-directed therapy may improve cardiovascular and renal outcomes in patients with diabetes and CKD.

P30 The Impact of Deprivation on Diabetes Clinic Attendance

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Non-attendance at outpatient clinics poses a challenge in healthcare and carries risk for poorer glycaemic outcomes. The aim was to evaluate the impact of socioeconomic deprivation on attendance at a diabetes outpatient clinic. A retrospective review of patients scheduled to attend a tertiary diabetes clinic over 12 months was conducted. Data was obtained from the IPMS. Registered address was used to determine Pobal HP Deprivation Index (www.pobal.ie). Appointments cancelled or rescheduled by the hospital were excluded. The total number of patients scheduled for the clinic over 12 months was 1623. The mean±SD age of the total population was 55.1±16.8 years. 57.6% of the population was male and 42.4% was female. Attendance rate at the clinic was 85.7%. Pobal deprivation index was distributed as follows 0% very affluent, 9.1% affluent, 39.1% marginally above average, 28.7% marginally below average, 11.3% disadvantaged, 7.6% very disadvantaged, 4.3% extremely disadvantaged. Attendance rates at the clinic were lowest among patients considered very disadvantaged (76%). Factors influencing attendance were examined between the different groups, no statistically significant difference was observed in age, English as a first language, listed contact number and registered GP. While significant differences were seen

in registration for SMS alerts, lowest registration rates were seen in higher affluence. Socioeconomic factors appear to influence non-attendance rates in the diabetes clinic, with higher representation in deprived groups. However, groups did not differ when traditional factors influencing clinic attendance were examined. Further study is needed to identify reasons for non-attendance among deprived groups.

P31 Older Adults with Type 1 Diabetes Mellitus: A Cross-Sectional Study to Guide Service Development

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Adults with type 1 diabetes (T1DM) are living into advanced age. Trial evidence and clinical practice guidelines focused on this cohort are limited but generally recommend an integrated approach to their care. We aim to better understand the characteristics of older adults with T1DM from a geriatric and diabetes perspective, to guide service delivery. A mixed-methods cross sectional study was undertaken to assess geriatric and diabetes outcomes in adults >75 years with T1DM attending a tertiary Irish hospital, with local ethical approval. Chart review was performed on 50 patients. 35 patients consented to complete a telephone questionnaire. Participants were aged between 75 and 91 years (mean 78.9 years). 88% (n=44) were living at home, with 58% (n=29) managing their diabetes independently. 88% (n=44) were using CGM and 16% (n=8) were using CSII. 10% (n=5) required ICU admission for diabetic emergency in the previous 2 years. 32% (n=16) had a Rockwood clinical frailty score of 5 or above and 12% (n=6) had a dementia diagnosis, whilst 18% (n=9) had seen a geriatrician. 64% of participants had never considered future care planning.This cross-sectional study highlights a frail population with T1DM who are vulnerable to diabetic emergency despite high rates of technology use. Frailty identification, increasing access to geriatric assessment and education surrounding future care planning may improve outcomes. Further research is needed to guide the management of T1DM for in older adults

P32 How effective are interventions in a specialist diabetes clinic?

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Background: In recent years access to interventions targeting glycemic control have expanded options for patients living with diabetes. These include continuous glucose monitoring (CGM) (2018), weekly GLP 1 agonist (2018), hybrid closed loop (HCL) pumps (2021) and SGLT2 inhibitors (2014). This has seen an increase in glycemic targets previously difficult to attain being achieved. Methods: Between January to December 2022 we audited all clinic attendees of a specialist diabetes centre to assess for sustained improvements in HbA1c and associated interventions. Sustained HbA1c improvements were identified as a fall of 10 mmol/mol or greater of an established HbA1c for a period of 18 months or more. Results: 15.6% of patients showed a substantial sustained reduction in HbA1c. 187 patients showed improvement in HbA1c of 10 mmol/mol or more. 147 patients showed HbA1c improvement of 15 mmol/mol or more, 35 had HbA1c improvement of 30 mmol/mol or more. The interventions associated with sustained improvements were, oral hypoglycemic agents established (26.63%), insulin intensification (24.45%), GLP1 agonists (22.28%), weight management (11.41%), dose adjustment for normal eating (4.89%), SGLT2 inhibitors (3.8%), HCL and technology (3.26%), undetermined (27.8%). Conclusion: Our data shows that sustained improvement in HbA1c for patients with complex diabetes is possible. Many of the interventions have significant health benefits beyond glycaemic changes. Established interventions remain the major contributor to improvement in HbA1c in our patients but newer interventions are starting to impact glycaemic outcomes across our clinics. Understanding why some patients don't benefit is worthy of detailed study.

P33 Are Hybrid Closed-Loop Pump Settings Optimised? A Real-World Audit of Pump Programming

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Optimising insulin pump settings is fundamental to hybrid closed-loop (HCL) therapy. We evaluated programmed insulin-to-carbohydrate ratios (ICR), insulin sensitivity factors (ISF) and pump settings in adults using Medtronic 780G and Tandem T:slim Control-IQ, and examined their association with glycaemic outcomes. A retrospective audit of 373 adults (311

Medtronic; 62 Tandem) was performed. Formula-derived ICR (350/TDD) and ISF (120/TDD) for Medtronic and ICR (400/TDD) and ISF (120/TDD) for Tandem users were compared with programmed settings, agreement was defined as within ±20%. In Medtronic users, glucose targets were 5.5 mmol/L in 76.8%, 6.1 mmol/L in 10.3% and 6.7 mmol/L in 7.1%. AIT was 2 hours in 62.4%, 2.5 hours in 16.4% and ≥3 hours in 11.9%. Mean HbA1c was 56.8±8.7 mmol/mol, GMI 6.92±0.43%, TIR 72.7±12.1% and CV 35.1±22.7%. 68% achieved TIR ≥70% and 45.5% had a HbA1c ≤53 mmol/mol. Pump setting for ICR and ISF agreed with recommendations in 49.1% and 63.1% of users. Tandem users have a set glucose target of 6.1 mmol/L. Mean HbA1c was 54.0±8.2 mmol/mol, GMI 7.31±0.59%, TIR 63.0±16.0% and CV 36.3±7.0%. 22.9% achieved TIR ≥70% and 42.6% had a HbA1c ≤53 mmol/mol. Agreement with recommended ICR and ISF was 70% and 72%, respectively. Tandem users demonstrated greater agreement with formula-derived ICR and ISF, yet Medtronic users achieved superior TIR and GMI. This suggests that glycaemic outcomes are influenced by both pump programming and HCL algorithm performance.

P34 Beyond Glycaemic Control: Cardiovascular Risk Factor Control in Adults Using Hybrid Closed-Loop Insulin Pump Therapy

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Hybrid closed-loop (HCL) therapy improves glycaemic control in type 1 diabetes, however, optimisation of cardiovascular risk factors remains essential. We evaluated the clinical characteristics, cardiovascular risk profile and prevalence of diabetes complications in adults attending the diabetes technology service in Beaumont Hospital. A retrospective audit of 381 adults receiving HCL therapy was performed using electronic health records including Cellma and MedLIs. Demographic, clinical and biochemical data were analysed. The cohort comprised 179 men and 202 women. Diabetes duration 27.3 years and HbA1c 56.3±11.6 mmol/mol. Mean BMI was 27.6±5.3 kg/m², 27% of patients had a BMI ≥30kg/m2. Diabetic retinopathy was present in 38.1%, peripheral neuropathy in 9.5%, microalbuminuria in 14.6%, previous diabetic foot ulcer in 1.8% and 5.2% had a documented cardiac event. Blood pressure of ≤130/80 mmHg was achieved by 46.81% individuals. Mean LDL cholesterol was 2.26±0.77mmol/L, and 31% had met an LDL cholesterol target of ≤1.8 mmol/L. Although overall glycaemic control was good, a substantial burden of diabetes complications and suboptimal cardiovascular risk factor control persisted. These findings emphasise the importance of comprehensive cardiovascular risk management in T1DM alongside advanced diabetes technology.

P35 Immune Checkpoint Inhibitor–Related Endocrinopathies (ICIRE): A Single-Centre Audit of Screening Compliance, Management and Outcomes

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Immune checkpoint inhibitors (ICIs) have transformed cancer treatment but are associated with endocrine immune-related adverse events affecting approximately 10–20% of treated patients. Thyroid dysfunction is the most common endocrinopathy while pituitary, adrenal and pancreatic involvement may result in significant morbidity and permanent hormone deficiency. Variability between published screening recommendations may contribute to inconsistent surveillance and management practices. A retrospective single-centre audit was conducted of adults receiving ICI therapy during the year 2024 (n=146). Data was collected retrospectively from electronic records from initiation of ICI to June 2026, and reviewed for demographics, ICI regimen, endocrine screening, endocrine dysfunction, management and outcomes. Compliance was benchmarked against locally developed guidelines synthesised from major international recommendations. Mean age was 64 years (range 20–90), with mean ICI exposure of 11.7 months. Melanoma (46.6%) and non-small-cell-lung cancer (23.3%) were the commonest indications. Pembrolizumab (44.5%) and nivolumab (27.4%) were the most frequently prescribed ICIs. ICIRE occurred in 39/146 patients (26.7%), exceeding expected incidence estimates. Hypothyroidism predominated (17.1%), followed by hypoadrenalism (5.5%), hypophysitis (2.7%), thyrotoxicosis (1.4%) and diabetes mellitus (0.7%). Mean time to onset ranged from 2–4 months. Baseline screening compliance was highest for thyroid function (92.5%) and cortisol (88.4%), but lower for HbA1c (39.0%) and pituitary assessment (10.3%). Interval surveillance showed greatest adherence for thyroid and adrenal monitoring. 17 patients were referred to endocrinology. ICIRE occurred more frequently than anticipated and developed early

following treatment initiation. Variation in surveillance and management practices highlights opportunities to standardise monitoring pathways and optimise multidisciplinary management.

P36 From Menarche to Menstrual Dysfunction : Relative Energy Deficiency in Sport and Reproductive Health

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Excess of energy expenditure over supply in athletes is termed low energy availability (LEA). Relative Energy Deficiency in Sport (REDS) results from prolonged exposure to LEA with a potential deleterious impact on reproductive health. Forty-four elite female intercounty GAA athletes underwent longitudinal assessment across a competitive season. Evaluation included the following : medical and menstrual histories, LEA risk assessment using the Low Energy Availability in Females Questionnaire (LEAF-Q) and reproductive hormone measurement (LH, FSH, oestradiol, progesterone, testosterone, sex hormone binding globulin and prolactin). The mean age of participants was 23.5 years [18-34], with 56% classified as at risk of LEA based on LEAF-Q. Mean age at menarche was 13.9 years [12-16]. Hormonal contraception was used by 36% of athletes. Overall, 27% reported a current or previous history of menorrhagia and 34% of athletes reported changes in menstruation associated with exercise. Among athletes not using hormonal contraception (n=27), 4% reported secondary amenorrhoea, 7% oligomenorrhoea and 9% reported a previous history of amenorrhoea. This is the first seasonal assessment of menstrual health in elite female GAA players. The mean age of menarche was comparable to that reported in other athlete populations and slightly higher than in the general population. Menstrual dysfunction was uncommon, compared with higher prevalences reported in other elite team sports. Overall these findings suggest that menstrual health in this cohort was broadly preserved despite a high prevalence of athletes classified at risk of LEA. Ongoing surveillance remains important however given the frequency of exercise-associated menstrual changes in this cohort.

P37 Evaluation of Post-operative Outcomes in Acromegaly: A Single-Centre Audit with Uniform Surgical and Endocrine Management

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Background: Acromegaly is a rare endocrine disorder most commonly caused by growth hormone secreting pituitary adenomas. Transsphenoidal surgery (TSS) is the recommended first-line treatment, with postoperative outcomes dependent on surgical expertise and structured longitudinal follow-up. This audit evaluated adherence to international postoperative surveillance recommendations within a single-surgeon, single-endocrinologist tertiary referral pathway in a dedicated pituitary unit. Methods: A retrospective audit was conducted of patients undergoing first-time TSS for acromegaly between July 2021 and July 2025. Patients were identified through infusion unit records for postoperative oral glucose tolerance testing (OGTT). Electronic records were reviewed for biochemical, radiological and clinical follow-up. Outcomes were benchmarked against Endocrine Society and 2025 Acromegaly Consensus Group recommendations. Results: Eleven patients were included (mean age 54.5 years; 81.8% female). Macroadenomas were present in 63.6%. All patients underwent postoperative OGTT with paired IGF-1 assessment. Age-adjusted IGF-1 normalisation and GH suppression to <1 µg/L were achieved in all patients, while 90.9% achieved GH suppression <0.4 µg/L. Median time to biochemical reassessment was guideline concordant at 12 weeks (range 6–52 weeks). All patients underwent repeat IGF-1 assessment within 6–12 months. Postoperative pituitary hormone deficiency occurred in 63.6%, most commonly isolated TSH deficiency. Follow-up MRI within 3–6 months occurred in 72.7%, however only 36.4% met recommended timing. No patient required repeat surgery, radiotherapy, or medical therapy. Conclusion: This audit demonstrated excellent biochemical and clinical surveillance and medium-term remission after TSS. Variability in imaging highlights opportunities for improved standardisation through structured surveillance pathways and multidisciplinary follow-up.

P38 Thyroid Eye Disease: Implementation of a standardised protocol in an Irish Tertiary Endocrinology Unit

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Background: Thyroid Eye Disease (TED) is an autoimmune condition affecting the retro-ocular tissues of patients with Graves' disease. It is a spectrum of signs and symptoms ranging from the mild to sight threatening. Endocrinologists play a central role in the screening, diagnosis, initial management and decision on referral of patients on to ophthalmology. The modifiable risk factors for the development of thyroid eye disease include uncontrolled Graves', cigarette smoking and the use of radioactive iodine. There is a 5 step approach to reducing morbidity associated with TED as suggested by the Endocrine Society. 1) Diagnose Graves' accurately, 2) Screen all patients with Graves' for TED, 3) Alert all patient with Graves' to risk of TED using early warning card, 4) Prevent TED development by modifying risk factors and 5) Referral to specialist clinic. Method:A chart review was undertaken to review screening for TED in patients undergoing treatment for Graves' and to ensure smoking cessation was advised. Results: Of the charts reviewed, 82% had documented screening for TED. Although only a small minority – 3 were screened using a standardised screening tool the 'Clinical Activity Score' (CAS) screening tool. 77% of charts had documentation of the smoking status and of the 33 smokers and vapers 29 (88%) had documentation of encouraging smoking cessation. 0 patients were given a warning card for TED. Discussion:This audit suggests that our centre performs moderately well in certain aspects, but poorly in others of the 5 step approach to reducing morbidity with TED.

P39 MET-KIDS: Longitudinal follow up study of mother-offspring dyads from the Emerge randomized control trial of metformin in pregnancies complicated by gestational diabetes.

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Metformin therapy is increasingly used in pregnancies complicated by gestational diabetes (GDM); however, some studies have suggested increased adiposity and obesity rates in offspring exposed to metformin in utero. Materials and Methods:This was a longitudinal follow-up of offspring born to women who participated in the EMERGE trial, who received up to 2.5g metformin or placebo from up to 28+6 weeks onwards. One follow-up visit was conducted 3-6 years after the index pregnancy. Child assessments include growth metrics and skinfold thickness. Results: Out of a total of 515 pregnancies, 270 (52.4%) mother-offspring dyads attended the follow-up visit. To assess potential follow-up bias, pregnancy and neonatal outcomes were compared between attenders and non-attenders, with no significant differences observed. At a median follow-up of 4.8 years, median BMI centile was similar between placebo-exposed offspring (88th centile, IQR 57–98) and metformin-exposed offspring (87th centile, IQR 66–96). Linear regression demonstrated no significant difference in BMI centile between treatment groups (adjusted mean difference 1.6 centile units, p=0.65), or in skinfold thickness 27mm (IQR 23-31) in placebo versus 26mm (IQR 22-32) in the metformin group (difference 0.29, p=0.739). High levels of overweight/obesity were observed(defined as a BMI centile above the 85th and 95th respectively). For weight, height and BMI regression analyses were performed to estimate the association between treatment allocation, offspring anthropometric and adiposity-related outcomes. For weight, BMI, and BMI-category outcomes, models were adjusted for offspring age at follow-up, sex, maternal insulin initiation in the index pregnancy, and birth.

P40 Maternal and neonatal outcomes in pregnancies with isolated hyperglycaemia at 120 minutes on a diagnostic oral glucose tolerance test for the diagnosis of gestational diabetes mellitus- a secondary analysis of the EMERGE Study

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The Hyperglycaemia and Adverse Pregnancy Outcomes study recommend a three-point blood draw for the diagnosis of gestational diabetes mellitus. The aim of this study is to determine the diagnostic utility of the two-hour glucose value and the maternal and neonatal outcomes of pregnancies with isolated hyperglycaemia at 2 hours. The results of 525 OGTTs conducted between 12-28 weeks of gestation were analysed. Group 1 had two-hour glucose levels of >8.5 mmol/L and normal fasting/one-hour glucose levels (isolated hyperglycaemia at 2 hours IH2); group 2 had either an elevated fasting glucose (>5.1 mmol/L)/one-hour glucose level (>10 mmol/L). From 525 women, 36 (6.9%) had IH2. 244 participants had isolated fasting hyperglycaemia only and 184 participants had hyperglycaemia >2 time points. IH2 had a lower body mass index and haemoglobin A1c at time of OGTT (29.5+3.5 vs 32+3.5 kg/m2 p 0.01; 31+2 vs 33+2 mmol/mol, p 0.02; and lower fasting glucose level at both 32 and 38 weeks (4.6 ± 0.4 vs 5.0 ± 0.6 $p<0.01$ and 4.3 ± 0.3 vs 4.6 ± 0.3 $p<0.01$) and required less insulin treatment. Maternal outcomes were similar between groups, IH2 infants were born on average 6 days later (p 0.02) than the other group. Of 36 women with IH2, one participant had type 2 diabetes mellitus at three month follow up and two participants had pre-diabetes. A small number of GDM cases and future diabetes/pre-diabetes (8.3%) would be missed if 2 hour testing was omitted.

P41 Attendance and Outcomes at Postnatal Oral Glucose Tolerance Test - Diabetes Screen following Gestational Diabetes

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Gestational diabetes mellitus (GDM) is increasingly prevalent and is estimated to affect approximately 13.2% of pregnancies. GDM has short-term and long-term implications in the antepartum, intrapartum and postpartum periods. Post-pregnancy testing with an oral glucose tolerance test (OGTT) is advised to screen for resolution or persistence of glucose abnormalities following pregnancy. Our aim was to examine attendance at postnatal OGTT and the rates of postnatal glucose abnormalities in our population. Individuals diagnosed with GDM managed pharmacologically, referred to the Diabetes team in 2024 were identified and records retrospectively reviewed. Characteristics were compared between the cohorts with positive and negative postnatal OGTT results and non-attendance using ANOVA, independent samples t-test, Mann-Whitney U-test and Chi-square tests. We reviewed records from 193 people. Mean (+/-SD) age was 35(+/-5), mean BMI 31(+/-6), 14.4% had a history of PCOS, 24.9% had a previous history of GDM, with no statistically significant differences between groups. Of the 129 that attended postnatal OGTT (67% attendance rate),glucose abnormalities were identified in 18.6% of cases, 1 (0.7%) impaired fasting glucose (IFG),18 (14%) impaired glucose tolerance (IGT), 4 (3.1%) with both IFG and IGT and 1 (0.7%) diabetes. Mean antenatal glucose challenge test, fasting, 1-hour, 2-hour and 3-hour results for those with positive vs negative postnatal OGTT were 10.8 vs 9.4, 5.7 vs 5.3, 12.0 vs 11.1, 10.1 vs 8.6 and 8.0 vs 6.6mmol/l, respectively, ($p<0.05$). We noted higher rates of attendance at postnatal OGTT-diabetes screening than previously reported, and similar rates of glucose abnormalities.

P42 Impact of Radiotherapy and Hypopituitarism on Neurocognitive Function in Brain Tumour Survivors

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Adult brain tumour survivors treated with cranial radiotherapy frequently experience burdensome cognitive impairment. Its prevalence and potential contributing factors, including hypopituitarism, remain poorly characterised. A prospective cross-sectional study of survivors (radiotherapy-treated and naïve) was conducted at Beaumont Hospital. Neurocognitive function

was evaluated across multiple domains using a comprehensive neuropsychiatric battery: premorbid functioning (TOPF-UK), current function (WASI-I), non-verbal memory (ROCFT), verbal memory (RAVLT, WMS-IV), executive function (WAIS-IV, RBANS semantic-fluency, D-KEFS), processing speed (RBANS coding) and language (Boston Naming Test). Severe cognitive impairment defined as scores ≤ -2 standard deviations on two tests across two domains. Radiotherapy-treated survivors underwent a glucagon stimulation test and pituitary profile. Prevalence of severe cognitive impairment was compared between radiotherapy-treated and radiotherapy-naïve cohorts, and within the radiotherapy-treated group by pituitary status. Ninety survivors were recruited (age 46.1±11.6 years, 48% female); 73% were radiotherapy-treated and 27% radiotherapy-naïve. Among radiotherapy-treated survivors, 31 (47%) had intact pituitary function and 35 (53%) had hypopituitarism. GH (n=35), gonadotropin (n=3), ACTH (n=2), and TSH (n=1) deficits were diagnosed. Prevalence of severe cognitive impairment was similar between radiotherapy-treated brain tumour survivors with and without hypopituitarism (26% vs 23%, p=0.99). Conversely, severe cognitive impairment was more common in radiotherapy-treated than radiotherapy-naïve survivors (24% vs 4%, p=0.04). Although radiotherapy-induced hypopituitarism is common in this cohort, it does not significantly contribute to neurocognitive impairment. Further studies are required to evaluate the impact of radiotherapy, tumour location and degree of surgical debulking on the development of neurocognitive deficits.

P43 A quality improvement audit of a multidisciplinary diabetic foot service: Reducing hospital admissions through outpatient antibiotic therapy and optimising glycaemic control.

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Diabetic foot infections (DFIs) are a major cause of hospitalisation, prolonged inpatient stay, and lower limb amputation, imposing significant clinical and economic burdens. Over 2,500 hospitalisations and 600 amputations were reported in Ireland in 2020. Effective management requires a multidisciplinary approach. An audit of an Infectious Disease Service governed multidisciplinary diabetic foot service was conducted during March 2026 in a tertiary teaching hospital. Twenty patients attending the service were included. Clinical characteristics, antimicrobial management, hospital admissions, and glycaemic control were assessed. Among the 20 patients, 8 (40%) had osteomyelitis, 11 (55%) had diabetic foot ulcers, and 1 (5%) had superficial cellulitis. Nine patients (45%) required hospital admission during the index episode. Three patients received outpatient parenteral antimicrobial therapy (OPAT), while the remainder were managed with oral antibiotics during the audit period. Sixteen patients (80%) received antibiotic therapy for at least six weeks. Previous DFI was documented in 12 patients (60%), of whom 6 (50%) had undergone prior amputation. Glycaemic control was suboptimal in this cohort, mean HbA1c was 63.8 mmol/mol. This audit identified opportunities for service improvement. Efforts to reduce antimicrobial duration are ongoing, with regular clinical review and assessment of response to therapy. The development of an integrated assessment pathway with early involvement from endocrinology and potential for rapid glycaemic optimisation may further improve outcomes. A streamlined pathway is under development aiming to improve holistic access to infectious diseases, endocrinology, podiatry, and surgical services. A re-audit will complete the cycle and assess the impact of these changes.

P44 Impact of early identification of gestational diabetes mellitus using booking HbA1c on maternal and neonatal outcomes: preliminary results from a retrospective cohort study

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Gestational diabetes mellitus (GDM) is associated with significant maternal and neonatal morbidity. In our institution, women with booking HbA1c 38mmol/mol or greater undergo early oral glucose tolerance testing (OGTT), at 16-20 week gestation, to facilitate earlier diagnosis and treatment of GDM. We performed a retrospective cohort study comparing women diagnosed with GDM through this early pathway with women diagnosed following routine 24–28-week screening. Maternal characteristics, diabetes management, and maternal and neonatal outcomes were compared using independent-samples t-tests, chi-square tests or Fisher's exact tests, as appropriate. Preliminary analysis included 80 women (24 early pathway, 56 routine screening) diagnosed in 2024. Women in the early pathway had a higher BMI (34.6 vs 29.9kg/m², p=0.021), higher booking systolic blood pressure (129.0 vs 119.7mmHg, p=0.003), and higher fasting glucose (5.27 vs 4.81mmol/L, p<0.001). They were more likely to receive combined metformin/insulin therapy (66.7% vs 19.6%, p<0.001) and demonstrated greater

incidence of gestational hypertension (25.0% vs 3.6%, p=0.008). There were no significant differences in composite neonatal outcomes. Infants from the early pathway had a lower mean birthweight (3215 vs 3389g, p=0.145), while caesarean delivery occurred more frequently (66.7% vs 46.4%, p=0.097), although without statistical significance. Women diagnosed through an elevated booking HbA1c pathway appear to represent a higher cardiometabolic risk subgroup requiring more intensive pharmacological treatment. Despite this, preliminary neonatal outcomes were comparable to those diagnosed through routine GDM screening. Ongoing recruitment will determine whether these trends persist in the full cohort.

P45 The Influence of Diabetes and Socioeconomic Deprivation on Outcomes of Non-Urgent Inpatient Coronary Angiography

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Diabetes is a well established driver of adverse cardiovascular outcomes. However, its influence on non-urgent inpatient coronary angiography remains less clear, especially in deprived populations. Our aim was to examine the effect of diabetes and cardiometabolic risk factors on angiographic outcomes in a disadvantaged inpatient population. We conducted a retrospective review of inpatients who underwent non-urgent coronary angiography over a 12 month period (n=144). Data collected included diabetes status, HbA1c, lipid profile, Pobal deprivation index, indication, angiographic diagnosis and intervention. Non-parametric tests were used given a non normal distribution. Median age was 68 years, with 72.9% being male. Diabetes was present in 23% (n=34), predominantly Type 2 disease (91.2%), with 17.6% requiring insulin. The median deprivation index was -1.83 indicating socioeconomic disadvantage. There was statistical significance between diabetes status and intervention type (p = 0.03). Patients with non-insulin-dependent diabetes were more likely to undergo Percutaneous Coronary Intervention (PCI) (53.6% vs 30.9% in non-diabetics), while patients without diabetes more often had no intervention. Gender also influenced intervention (p=0.03), with men were more likely to undergo PCI or Coronary Artery Bypass Graft (CABG) (53.3% vs 33.3%). Socioeconomic status differed significantly (p=0.01). Patients undergoing PCI or CABG were markedly more deprived than those receiving no intervention. No statistical difference was identified by BMI, HbA1c, cholesterol level, age, or obesity status. Diabetes meaningfully affected angiographic outcomes in this deprived inpatient cohort. Diabetes and socioeconomic deprivation independently predicted higher revascularisation rates, whereas traditional metabolic markers showed little association with intervention.

P46 Impact of a virtual multidisciplinary diabetes in pregnancy clinic on appointment burden and unscheduled presentations

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Methods of delivery of optimal care to women with diabetes in pregnancy, without imposing an excessive treatment burden, are of significant clinical and economic importance. Here, we describe the establishment of a new pathway in a large maternity hospital with aim of reducing both face to face clinic visits and unscheduled attendances, while delivering optimal care. Our centre has approximately 4000 deliveries and cares for almost 700 women with diabetes in pregnancy per year. We established an extra weekly MDT (consultant and specialist midwife) virtual clinic (VC), consisting of telephone contact with remote monitoring of glucose readings via commercially available online platforms, both for women with pregestational diabetes, and with gestational diabetes requiring insulin. Here, we compare figures in the 3 months prior to introduction, with 3 months after, following a brief transition period. In the 3-month period prior to the introduction of the VC, there were 547 contacts (from 89 individuals) with the diabetes in pregnancy clinic- 430 scheduled, and 117 unscheduled contacts. Following VC there were 588 contacts (from 107 individuals) over 3 months- 354 scheduled face to face visits , 67 unscheduled contacts, and 165 VC contacts. Introduction of a virtual MDT clinic resulted in a 9% increase in overall contacts, despite a 20% greater number attending the service. Face to face appointments were reduced by 35%, and unscheduled contacts were reduced by 63%. Further study may define further clinical care and economic benefits among subgroups.

P47 Beyond the Protocol: The Emerging Role of Point-of-Care Ultrasound in Individualising Fluid Resuscitation in Hyperglycaemic Emergencies

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Background: Fluid resuscitation is a cornerstone in management of hyperglycaemic emergencies. However an increasing proportion of this cohort have co-morbidities which limit the rate and total volume of fluid tolerated. We studied the role of Point-of-Care Ultrasound (POCUS) integrated with clinical assessment as a tool for individualisation of fluid replacement. Methods: Five consecutive patients (3 Males) admitted with hyperglycaemic emergencies underwent POCUS (cardiac, IVC, lungs) to assess volume status at admission and serially during their treatment, to individualise their fluid replacement. This study presents findings of impact that this personalization of fluid replacement, had on total volume replacement, when compared to Inpatient-Joint British Diabetes Society guidelines and outcomes. Results: All 5 patients had Type 1 diabetes mellitus, with a median age of 49 years (IQR 37-57) and presented with moderate-to-severe diabetic ketoacidosis (DKA). POCUS guided Personalisation of fluid therapy led to 25 to 50% variation of total volume infused compared to guidelines.3 patients required 1.5 litre extra fluid (30% excess) during first 6 hours due to IVC underfilling on serial POCUS, while 2/5 had curtailed fluid intake by 25% due to POCUS signs of fluid overload. All patients had resolution of DKA in mean 10±1 hours of admission without any relapse of DKA. Conclusion: This preliminary study demonstrates that there may be a significant interpersonal variability in fluid requirements when treating hyperglycaemic emergencies and POCUS may be a valuable adjunct in guiding fluid resuscitation in this cohort for individualisation.

P48 Discordance between HbA1c and Time in Range in adults with Cystic Fibrosis-Related Diabetes: a retrospective audit

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Cystic fibrosis-related diabetes (CFRD) is a common complication for patients living with cystic fibrosis. Optimal glycaemic control is crucial for patient outcomes. HbA1c is the traditional gold standard for assessing glycaemic control, but it has known limitations. Continuous Glucose Monitoring (CGM) provides real-time data, including Time in Range (TIR), which may offer a more complete picture of glycaemic control. Our aim was to analyse the discordance between HbA1c and TIR. A retrospective analysis was conducted between November 2025 and March 2026. A CFRD registry of 130 patients was reviewed. Patients were included if they had HbA1c and CGM download within the same 3-month period. Data was collected from electronic medical records and CGM device software. Targets were defined as HbA1c ≤53 mmol/mol (7%) and TIR ≥70%. In total, 63 patients were included in the analysis. Mean age was 39 (± 9.5) years with 51% female. 59% (n=37) met the HbA1c target while 40% (n=25) met the TIR target. Only 36.5% (n=23) met both targets. Discordance was observed in 25% (n=16) of patients. 22.2% (n=14) achieved HbA1c ≤53 mmol/mol but had TIR <70%, indicating unrecognised glycaemic variability or high burden of hypoglycaemia, while 3.2% (n=2) had TIR ≥70% despite HbA1c >53 mmol/mol. Our results demonstrate that relying on HbA1c alone may overestimate glycaemic control in CFRD patients using CGM. Almost 25% of patients with a target HbA1c had suboptimal TIR. Incorporating CGM-derived metrics into CFRD monitoring may improve glycaemic assessment and patient safety.

P49 Clinical Audit of Turnaround Time and Analytical Quality in an Endocrine Satellite Laboratory

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Background: Same-day biochemical results are essential for efficient clinical decision-making in endocrinology services. The Simms Building satellite laboratory at Tallaght University Hospital (TUH) was established to optimize patient flow through timely reporting. Aim: To evaluate the turnaround time (TAT) performance, analytical quality, and operational efficiency of the endocrine satellite laboratory over a three-month period. Methods: A combined retrospective and prospective audit tracked endocrinology and diabetes samples processed in the satellite laboratory. TAT was defined as the interval between phlebotomy and electronic validation. The target TAT was established at <180 minutes. Internal Quality Control (IQC) compliance and pre-analytical errors were also assessed. Results: Sixty samples were evaluated, comprising 32 thyroid function tests (TFTs)

and 28 HbA1c tests. The mean TAT was 76.2 minutes. Overall, 93.3% of samples (n = 56) met the target, being validated within 180 minutes, while 46.7% (n = 28) were reported within 60 minutes. Four samples exceeded the 180-minute threshold. Operational bottlenecks included barcode scanning errors, peak-hour staffing constraints, and time spent on IQC calibration. Additionally, a mismatch between clinic start times and phlebotomy opening hours was identified. Conclusion: The satellite laboratory demonstrates satisfactory analytical quality and efficient TAT performance, safely supporting same-day clinical decisions. To further optimize patient flow, recommendations include aligning phlebotomy opening hours with clinic commencement times, advising patients to arrive one hour pre-consultation, and deploying a dedicated porter to expedite sample transport.

P50 Optimising the Referral Pathway for Adrenal Incidentalomas in an Irish Regional Hospital: A Retrospective Clinical Audit

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The increasing utilisation of cross-sectional imaging has led to a substantial rise in the detection of adrenal incidentalomas, creating an evolving challenge in endocrine practice. While most lesions are benign and non-functioning,a clinically significant minority may represent hormonally active Lesions/Malignancies. The 2023 ESE guidelines advocate a risk-stratified approach to investigation, surveillance, and specialist referral. A retrospective-clinical-audit was performed of all dedicated CT-adrenal scans undertaken at St. Luke's General Hospital between Feb 2025 and Feb 2026. Adult patients with incidentally identified adrenal lesions were included, and radiological, biochemical and clinical data were evaluated against guideline standards. Seventy patients met inclusion criteria. Lesion size was documented in 95.7% of reports; however, Hounsfield-unit measurements were omitted in 34% of cases. Thirty-one patients (44%) had lesions with Hounsfield-units below 10, while six patients (8.6%) were classified as having indeterminate lesions. Adherence to recommended hormonal assessment was suboptimal, with a 1 mg overnight dexamethasone-suppression-test performed in only 31% of patients and plasma/urinary metanephrines measured in 48.6%. Twenty-five patients underwent surveillance-imaging, of whom 21 had lesions previously characterised as benign and therefore did not warrant further follow-up. Twenty-eight patients were referred to endocrinology services; however, only seven referrals were supported by radiological uncertainty or biochemical abnormality.This audit highlights important discrepancies between evidence-based guidance and clinical practice. Implementation of a standardised-referral-pathway, structured radiology reporting and improved adherence to biochemical screening recommendations may reduce unnecessary investigations and specialist referrals while facilitating timely assessment of patients at genuine risk of clinically significant adrenal disease.

P51 The Aldosterone Renin Ratio – Increased Screening Activity and Improved Rates of Onward Referral Following a Quality Improvement Project

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A 2023 audit at Regional Hospital Mullingar (RHM) found that aldosterone and renin were frequently measured in the presence of confounding medications, and patients with high aldosterone renin ratio (ARR) were seldom referred on for suspected primary hyperaldosteronism (PHA). We present a re-audit following a quality improvement project and educational interventions targeting service users in primary and secondary care. We included all ARR results 01/01/2025 – 30/06/2025 (n=144) and compared data with the prior audit period 01/01/2023 – 31/12/2023 (n=144). Indications for testing, confounding medications and referral outcomes for patients with ARR >25 (the IDS-iSYS assay-specific threshold indicating possible PHA) were obtained where available. Twenty-three samples (23/144, 16.0%), from 20 patients, had ARR >25 compared with 34/144 (23.6%) in 2023. We note a small improvement in the rate of concomitant potassium measurement (121/144, 84.7% versus 111/144, 77.1%). However, ARR was commonly measured in the presence of potentially confounding medications (12/18, 66.7% versus 11/18, 61.1%) including beta-blockers (7/18, 39%) and spironolactone (2/18, 11%). Encouragingly, patients with (14/23, 60.9%) ARR-positive samples had been referred for specialist assessment, up from (8/34, 23.5%). These data indicate a two-fold increase in ARR screening activity and a significant increase in the number of ARR-positive patients being referred for further assessment following educational intervention. Further intervention is warranted, as a sizeable minority of ARR-positive patients were not referred, and ARR is still frequently measured on confounding medications.

P52 Obesity as a Barrier to Renal Transplantation: An Audit of Obesity Prevalence and Management in Patients Receiving Hospital Haemodialysis in a Tertiary Centre

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Renal transplantation is the preferred treatment for suitable patients with end-stage kidney disease, offering improved survival and quality of life. In Ireland, a body mass index (BMI) >32 kg/m2 constitutes an exclusion criterion for renal transplantation. A cross-sectional audit was conducted in February 2026 of 164 patients receiving hospital haemodialysis in a tertiary centre, using the national renal electronic record and chart review. 24 patients (14.6%) had a BMI of >32 kg/m2. Of the 24, fourteen patients were ineligible for transplantation due to comorbidities. The remaining ten (10/164, 6.1%) were ineligible for transplantation on the basis of BMI alone. The mean age of this subgroup was 57.2 years (standard deviation [SD] 8.4), with 30% female and high prevalence of obesity-related complications (hypertension (10/10), ischaemic heart disease (4/10), type 2 diabetes mellitus (4/10), obstructive sleep apnoea (4/10), depression (2/10) and dyslipidaemia (10/10). The median duration on haemodialysis in this group was 62 months (interquartile range [IQR] 94), compared with a national median of 34 months prior to transplantation in 2024. Two patients had been referred to specialist obesity services. One patient had bariatric surgery and was on semaglutide. In this tertiary centre, obesity interventions were infrequently utilised among patients excluded from kidney transplantation on the basis of BMI. Earlier multidisciplinary obesity management, including pharmacological and surgical interventions where appropriate, may improve transplant eligibility, reduce time on dialysis, and improve patient outcomes.

P53 A Modifiable Barrier to Improved Outcomes in End Stage Kidney Disease: An Audit of BMI and use of GLP-1 agonists in Patients with End-Stage Kidney Disease in a Tertiary Centre

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Ireland has one of the highest rates of obesity in Europe, with over 60% of adults living with overweight or obesity. In Ireland, a body mass index (BMI) >32 kg/m² is a barrier to transplantation. Glucagon-like peptide-1 receptor agonists (GLP-1RAs) are a treatment option for obesity. The objective of this audit was to evaluate BMI, GLP-1RA use and related co-morbidities in patients with end stage kidney disease (ESKD) to identify potential modifiable impediments to transplantation. The audit took place in a tertiary centre in April 2026. We assessed patients attending ESKD clinics to determine the prevalence of obesity, current use of GLP-1RAs, and the proportion of patients excluded from transplantation due to BMI. Of 199 patients reviewed, BMI was documented in less than half (n= 93; 47%). Twenty-three patients (12%) had a BMI >32 kg/m². Of these patients, 14 were ineligible for transplantation based on BMI alone. In this subgroup, five patients were already using GLP-1RA therapies, with one discontinuation due to intolerance. Obesity-related comorbidities in those not on GLP-1RAs included type 2 diabetes mellitus 44% (n=4), hypertension 78% (n=7) dyslipidaemia 100% (n=9) depression 67% (n=6), osteoarthritis 67% (n=6), and obstructive sleep apnoea 44% (n=4). This audit identified gaps in terms of both identification and treatment of elevated BMI in a high-risk ESKD population. Routine assessment of BMI and targeted weight-management strategies, including pharmacologic therapy, may improve overall health and increase transplant eligibility.

P54 Provision of a face-to-face insulin education programme for interns and senior house officers

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Introduction: Errors in insulin prescribing are common and can result in patient harm. Additionally, many non-consultant hospital doctors (NCHDs) feel inadequately prepared to prescribe insulin. This quality improvement project aimed to improve junior doctors' knowledge of and confidence in insulin prescribing at our centre. Methods: Face-to-face tutorial style teaching sessions were delivered to interns and senior house officers (SHOs) at our centre over the academic July 2025 to June 2026. Feedback was collected prior to and immediately after the session using a Likert scale. Results: 65 NCHDs gave feedback over 4 sessions. There was a 21.5% improvement in those strongly agreeing or agreeing to having confidence in identifying diabetic ketoacidosis (DKA). 27.5% had an increase in confidence managing DKA. There was a 51.4% increase in confidence

identifying hyperosmolar hyperglycaemic state (HHS) and a 54% increase in confidence managing HHS. Despite a strong baseline where 81.5% of doctors felt confident managing hypoglycaemia before the session, there was a 13.7% increase afterwards. There was a 31.7% and 27.1% increase in those strongly agreeing or agreeing to having confidence in charting basal insulin and short acting insulin respectively. There was a 53% and 42.1% increase in those strongly agreeing or agreeing to being confident in titrating basal and short acting insulin respectively. Conclusion: Delivery of a structured insulin education program improved confidence levels in the identification and management of diabetic emergencies amongst interns and SHOs. A significant improvement in confidence around insulin titration was also demonstrated.

P55 Exercise Counselling and Awareness in Diabetes Outpatient Care: A Clinical Audit

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Physical activity is a cornerstone in the management of diabetes, improving glycaemic control, insulin sensitivity, and long-term cardiovascular outcomes. National HSE guidance recommends at least 150 minutes of moderate-intensity exercise weekly, while the ADA emphasises routine assessment and promotion of physical activity for all people with diabetes. This audit evaluated the frequency of exercise-related discussions in a tertiary diabetes outpatient centre and assessed patient-reported awareness of recommended guidance. A total of 52 patients completed a survey (40.4% type 1 diabetes mellitus (T1DM) 57.7% type 2 diabetes mellitus (T2DM), 1.9% not stated).Exercise was consistently discussed across both cohorts. It was reported by patients as "always" discussed in 57.1% of the T1DM cohort and 46.7% of those with T2DM and "often" in 28.6% and 33.3% respectively. Fewer patients reported "rarely" (14.3% vs 13.3%), while "never" was reported only in the T2DM cohort (6.7% vs 0%), indicating slightly more consistent counselling in the T1DM cohort. Differences in patient awareness were evident. A trend towards higher awareness of recommended weekly exercise targets was observed in the T1DM cohort (76.2% vs 50%, p=0.059). More patients with T1DM than T2DM understood moderate versus high-intensity exercise (90.5% vs 64.3%, p=0.035), the awareness of exercise benefits for glycaemic control (100% vs 83.3%, p=0.049), and its use for prevention of long-term complications (100% vs 73.3%, p=0.012). While exercise counselling was routinely delivered, patients with T1DM demonstrate consistently higher levels of exercise-related awareness, highlighting an opportunity to enhance education in type 2 diabetes populations.

P56 Preparing for pregnancy: outcomes from a diabetes pre-pregnancy clinic in Ireland

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Pre-conception care improves maternal and foetal outcomes in diabetes. We describe the pathway and outcomes of a pre-pregnancy clinic (PPC) within an adult Level 3 specialist ambulatory diabetes service.A structured multidisciplinary (MDT) PPC pathway for women with type 1 (T1) and type 2 (T2) diabetes was implemented. A retrospective audit was conducted using Microsoft Excel. Data are presented as mean ± standard deviation. The PPC pathway comprises 2-6 weekly appointments, primarily telehealth, with individualised treatment targeting HbA1c<48 mmol/mol, medication optimisation, obesity management, medical nutrition therapy and health behaviour support. Between June 2021 and 2026, 62 women were referred (68% T1; 32% T2), from the diabetes MDT (42%), linked acute services (42%) and general practice (16%). Baseline HbA1c was higher in T2 than T1 (68 ± 20 vs 54 ± 12 mmol/mol; p<0.01), but similar when contraception was discontinued (48 ± 4 vs 50 ± 12; NS) at 6 ± 5.5 months (7 ± 4.6 vs 5 ± 5.4 months for T2 vs T1; NS). In T1, 57% remained on, while 22% (n = 4) transitioned to insulin pump therapy. In T2, 75% required insulin therapy to optimise glycaemia. Overall, 26% used assisted fertility, 35% achieved pregnancy, 16% discharged/dropped out, and 42% (n = 26) remain active in the PPC. A structured, resourced MDT PPC embedded within a diabetes service supports pregnancy preparation. Comparable glycaemia outcomes were achieved in T1 and T2. These real-world data further demonstrate the feasibility and effectiveness of a dedicated PPC and provide a useful model for services developing care pathways.

P57 An Audit of Management of Thyroid Nodules in a Multidisciplinary Setting in Connolly Hospital Blanchardstown

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Thyroid nodules are common, with a minority representing malignancy. Multidisciplinary team (MDT) input is recommended in selected cases to guide management. This audit assessed adherence to the 2014 British Thyroid Association (BTA) guidelines in thyroid nodule investigation and management at MDT meetings in Connolly Hospital Blanchardstown. A retrospective audit of patients discussed at thyroid MDT meetings between January and July 2025 was performed. Data was collected from MDT records, medical notes, radiology and cytopathology reports, and GP correspondence. Variables included demographics, indication for discussion, nodule size and number, sonographic (U), cytological (THY) classification, and follow-up decisions. N=104 patients were included (mean age 55.2 ± 13.4 years; 84.6% female). Multiple nodules were present in 74%, with a mean size of 3.1 ± 2.7cm. Sonography-only cases accounted for 49%, while 51% had both sonographic and cytological data. MDT discussion was not indicated in 36% of sonography-only cases and 32.1% of combined cases. Fine needle aspiration (FNA) was indicated in 54.9% of all cases and recommended in 21.5%, of which 82% were performed. In remaining cases, FNA was deemed unnecessary following consultant-led ultrasound. Sonographic classification changed in 16% of cases; whereas cytological classification remained unchanged. This audit demonstrated a higher proportion of MDT discussions and lower rates of FNA recommendations than outlined in BTA guidelines. Documentation gaps and some variability in sonographic classification were also observed, which may have influenced MDT decision-making. Introduction of standardized referral and reporting templates, alongside guideline-based decision support, may improve consistency, documentation, and alignment with recommended practice.

P58 Evaluating the Clinical Utility of Inpatient Ketone Testing in Type 2 Diabetes: A Prospective Audit

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Point-of-care (POC) ketone testing is common in hospitalised patients with diabetes, however clinical utility outside recognised indications remains uncertain. This audit aimed to quantify testing for approved indications, determine diagnostic yield outside guideline-based indications, and identify areas for revision of current guidance. The standard utilised was the local hospital guideline. Recommended indications for POC ketone testing included Type 1 diabetes mellitus (T1DM) with capillary blood glucose (CBG) >15 mmol/L, recent/current sodium-glucose co-transporter-2 inhibitor (SGLT2-i) use, intravenous insulin including hyperglycaemic emergency protocols, and sliding-scale insulin (SSI) with CBG >15 mmol/L. A prospective audit was conducted over 17 non-consecutive days (n=500 ketone readings, 113 patients). Data collected included glucose reading, diabetes type, subcutaneous/intravenous insulin/SSI or SGLT2-i use, oral intake status and presence of acidosis. Appropriate testing occurred in 73.7% (171/232) of T1DM. In T2DM, including patients on SSI with CBG >15 mmol/L, appropriate testing occurred in 40.9% (90/220). Excluding SSI, appropriate testing fell to 13.2% (29/220) and inappropriate testing increased to 86.8% (191/220). Among the 191 tests performed outside recognised indications, only four ketone results exceeded 3 mmol/L and none demonstrated acidosis. Only 12/220 (5.5%) tests were performed in individuals with T2DM recently or currently receiving a SGLT2-i. Routine ketone testing in hospitalised patients with T2DM demonstrated low diagnostic yield and rarely identified clinically significant ketosis. Clarifying local indications and targeted education may reduce unnecessary testing while maintaining patient safety and access for patients at genuine risk of ketoacidosis.

P59 The Impact of Reproductive Stage on Weight Loss Outcomes after Bariatric Surgery in Women Living with Obesity

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The menopause transition is associated with hormonal and metabolic changes that pose unique challenges for women living with obesity. This study aimed to evaluate the impact of reproductive stage on postoperative weight-loss outcomes in women undergoing bariatric surgery.We performed a retrospective observational study of women undergoing bariatric surgery between 2001-2023. Participants were classified as premenopausal, perimenopausal, or postmenopausal based on age, documented menopausal status, and follicle-stimulating hormone levels where available. Clinical characteristics and weight-loss outcomes at 2-years post-operatively were analysed. A total of 365 women were included: 151(41.4%) premenopausal, 114(31.2%) perimenopausal, and 100(27.4%) postmenopausal. Mean age was 46.2 ±10.0 years, mean preoperative body mass index (BMI) was 50.5 ±8.0 kg/m². Baseline body weight differed significantly between groups, highest in premenopausal women (143.8 ±24.8 kg) and lowest in postmenopausal women (128.8 ±20.7 kg; p<0.001). Percentage total weight loss (%TWL) at 2 years differed modestly between groups (28.6%, 27.4%, and 24.9%, respectively; p=0.046). However, absolute body weight, BMI, and the proportion achieving >5%, >10%, >20%, or >30% TWL at 2 years were similar across groups. In multivariable analysis, reproductive stage was not independently associated with %TWL after adjustment for age, baseline BMI, and procedure type, whereas surgical procedure remained a significant predictor (p=0.04). Although modest differences in %TWL were observed across reproductive stages, postoperative BMI was comparable. Weight-loss outcomes appear to be driven predominantly by baseline clinical characteristics and surgical procedure rather than reproductive stage."

P60 Meal Announcement and Glycemic Control in Hybrid Closed Loop Therapy

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Hybrid closed loop insulin therapy requires meal announcement to deliver an insulin bolus for ingested carbohydrates. The aim of the study was to determine the impact of mealtime bolus announcement on glycaemic control. Three months of Carelink data was compiled on adults attending the diabetes clinic and using the Minimed 780G pump. Linear regression was used to measure the relationship between dependant and independent variables. Data was available on 47 adults, median age 26 years (IQR 27). Median Smartguard use was 96% (IQR 9) within this cohort. Glycemic management index (GMI) was excellent, median GMI 52.1 mmol/mol (IQR 7.25). Increased frequency of meal announcement correlated significantly with lower GMI, $R2 = 0.29$ ($B = –1.58$, $SE = 0.36$, $t = –4.34$, $p < .001$, 95% CI [–2.31, –0.84]). There was a weak association observed between percentage Smartguard use and lower GMI. However, no significant relationship between GMI and Smartguard target or active insulin time (AIT) was observed. The relationship between frequency of meal and GMI remained significant on multiple linear regression, that included age, AIT, Smartguard target, and Smartguard use, $R^2 = .45$ ($B = –1.44$, $SE = 0.35$, $t = –4.15$, $p < .001$, 95% CI [–2.14, –0.74]). The percentage of autocorrection delivered significantly increased with fewer meal announcements. Meal announcement is an important determinant of glycemic control when using the Smartguard algorithm. Autocorrection correlates closely with mealtime bolus. Where high rates of autocorrection are observed attention should be paid to mealtime bolus patterns.

P61 The role of male foetal sex on maternal and foetal outcomes in pregnancies complicated by gestational diabetes - secondary analysis of a randomized placebo controlled clinical trial of metformin in Gestational Diabetes (EMERGE)

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Objective: To determine whether foetal sex modifies maternal and neonatal outcomes in gestational diabetes, and asses the sex-specific response to metformin. Research design and methods: We conducted a secondary analysis of the Early Metformin in Gestational Diabetes (EMERGE) randomised controlled trial and analysed foetal outcomes according to sex and metformin exposure. Results: At randomisation, women carrying a male foetus had a higher plasma glucose at 60 minutes on oral glucose

tolerance testing (9.69 vs 9.37 mmol/L, p=0.039). In exploratory analyses, metformin exposure in male pregnancies was associated with lower fasting glucose at 32 and 38 weeks and reduced insulin use (38% vs 53%, p=0.014), with smaller effects in female pregnancies. However, the sex-by-treatment interaction was not significant, so these findings should be regarded as hypothesis-generating. Glucometer data suggested a greater mean glucose reduction in males than females (0.2-0.3mmol/L versus (01.-0.2 mmol/L). Conclusion: Further follow-up is required to determine whether foetal sex influences long-term effects of metformin in pregnancy.

P62 Real-world glycaemic outcomes and CGM metrics by Hybrid Closed Loop delivery system in a single Irish paediatric diabetes centre

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Real-world comparative outcome data across Hybrid closed-loop (HCL) systems remain limited. We aim to describe glycaemic outcomes by HCL system in children and adolescents living with Type 1 Diabetes (T1D) using sensor derived continuous glucose monitor (CGM) metrics. We performed a retrospective evaluation of patients with T1D attending CHI Crumlin at a single time point in June 2026. Patients were grouped according to insulin delivery system. The following HCL/CGM systems were in use MiniMed 780G with SmartGuard using Guardian 4 or Simplera Sync, Tandem t:slim X2 with Control-IQ using Dexcom G6 or G7, YpsoPump with CamAPS FX using Libre 2+ or Libre 3+, or multiple daily injections (MDI) with Dexcom or Libre. The primary outcome was 14 day sensor-derived time in range (TIR) and nearest available ambulatory point of care HbA1c within 6 weeks of date of data acquisition. Data on 442 patients was available. 125 MiniMed780G, 122 TandemT:Slim , 41 YpsoPump, 154 MDI (100 Dexcom, 54 Libre). Median TIR %[IQR] was: MiniMed780G 71%[64-77], TandemT:Slim 62% [54-70], YpsoPump 64% [56.5- 71.5], MDI with Libre 56.5% [13-71], MDI with Dexcom 56% [40-68]. Interim analysis of median point of care HbA1c (n=153) was similar across HCL users: 7.2% [6.7-7.5]in Minimed780G n=54; 7.1 % [6.7- 7.5] in TandemT:Slim users n=72; and 7.0 [6.8-7.5] in YpsoPump users n=27. Among HCL systems in our clinic MiniMed780G users had the highest median time in range, although HbA1c was broadly similar across pump systems.

P63 An audit of rates of pituitary assessment in patients with Primary Empty Sella.

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Primary empty sella (PES) is an MRI finding of herniation of the suprasellar subarachnoid space within the sella turcica, leading to flattening of the pituitary gland, in patients with no existing pituitary pathology. The detection of empty sella and partially empty sella has increased due to the increased sensitivity and availability of MRI. Empty sella and partially empty sella have been shown to be associated with hypopituitarism; however rates of hypopituitarism are not fully defined. We conducted a retrospective keyword-based search of radiology reports in TallaghtUniversity Hospital over a defined 6 month period. Demographics, MRI indication,clinical course and laboratory results were obtained by chart review. 36 patients were identified to have a finding of empty sella/ partially empty sella on MR imaging over a 6 month period. The mean age was 61 years at diagnosis. 83% were female. Headache was an indication for MRI in 25%, with workup for stroke like symptoms, seizure and confusion noted as the indication in 19%, 14%, and 11% respectively. In our study only 3 patients (8%) had comprehensive pituitary assessment at diagnosis, with one patient displaying biochemical hypopituitarism, affecting the gonadotrophic and thyroid axes. Existing literature demonstrates that all patients with incidentally detected empty sella should have baseline pituitary assessment, regardless of presentation, given high prevalence of pituitary dysfunction. This is under-investigated in our patient cohort and highlights the need for a standard protocol for evaluation of PES in our centre.

P64 Auditing Compliance of Healthcare Professionals with Checking the Urinary Albumin-to-Creatinine Ratio as an Early Marker for Diabetic Nephropathy

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Diabetic nephropathy is one of the most common complications associated with diabetes mellitus. It is a leading cause of end stage renal disease (ESRD). Studies suggest that 20% to 40% of patients will eventually develop diabetic kidney disease. It is

important to detect early complications so that appropriate treatment can be given to avoid further damage. American Diabetes Association (ADA) recommend checking UACR at least annually in people with type 1 diabetes with duration of ≥5 years and in all people with type 2 diabetes. In people with CKD, it should be 1-4 times annually depending on stage of kidney disease. It was a retrospective observational study, The study cohort comprised 150 adult patients who were diagnosed with type 1 diabetes mellitus (with a disease duration of ≥5 years) and type 2 diabetes mellitus. Patient data was collected from medical charts and blood results were checked from HSE patient administration systems (PAS). Within study population 76/150 (50.70%) were male and 74/150 (49.30%) were female. The mean age of study population was 65.36 years (95% CI 63-67.7), with mean HbA1C level of 61.17 mmol/mol (95% Cl 59.1-63.3). In our study 26/150 (17.3%) patients were active smoker and mean body mass index was 29.20 kg/m2. Compliance with checking UACR as per ADA guidelines was 38.67%. Compliance was suboptimal, indicating a gap in early diabetic kidney disease surveillance. Targeted quality-improvement measures may improve adherence to guideline-based renal surveillance.

P65 Audit of peri-procedural ketone monitoring and management in patients prescribed sodium-glucose-cotransporter-2 (SGLT2) inhibitors undergoing endoscopy.

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SGLT2 inhibitors are increasing being used given cardiovascular and glycaemic benefits. Patients on SGLT2 inhibitors who are required to fast prior to endoscopic procedures require careful peri-procedural ketone monitoring and management, due to risk of euglycaemic diabetic ketoacidosis (eDKA). Current advice is to hold SGLT2 inhibitors 72 hours pre-procedure. There is currently no standardised guideline on ketone monitoring or optimal management of peri-procedural ketosis. Our aim was to assess our current practice for peri-procedural ketone monitoring and management in our endoscopy unit. A retrospective audit of patients attending for endoscopy between March-May 2026 was undertaken. Endoscopy lists and pre-assessment codes were used to identify patients. Current protocol is hourly ketone monitoring, contact the diabetes team when ketones >0.6mmol/L and cancellation of procedure when ketones >1.0mmol/L. In total, 813 patients attended the endoscopy unit during this timeframe. 6.6% (n=54) had a diagnosis of diabetes mellitus (DM). 4.5% (n=36) were prescribed an SGLT2 inhibitor, 22 patients for DM and 14 patients for heart failure (HF). 10 patients (7 DM, 3 HF) had ketones >0.6mmol/L requiring contact with the diabetes team. 2 patients (2 DM) had ketones >1.0mmol/L requiring procedure cancellation. Our results demonstrate that with increasing use of SGLT2 inhibitors, education and guidance for ketone monitoring and management is essential. This requires a standardised protocol for peri-procedural ketone monitoring and management to improve patient safety and avoid unnecessary procedure cancellation. A new protocol has been developed following this audit and re-audit post implementation will be required.

P66 Impact of Advanced Hybrid Closed Loop Insulin Pump Therapy on Glycaemic Outcomes in Adults with Type 1 Diabetes: A Clinical Audit

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Advanced Hybrid Closed Loop (AHCL) insulin pump systems represent a significant advancement in Type 1 diabetes management, combining continuous glucose monitoring (CGM) with automated insulin delivery to optimise glycaemic control. This audit evaluated the impact of AHCL initiation within a newly established diabetes technology service. A retrospective clinical audit was performed involving 65 adults with Type 1 diabetes initiated on AHCL therapy over a two-year period. Medtronic MiniMed 780G,Ypsomed and TandemT slim were included. CGM data was collected from diabetes technology platforms including CareLink, Glooko and Tandem sources. Glycaemic outcomes before AHCL initiation were compared with follow-up data after pump commencement. Primary outcomes assessed were Time in Range (TIR: 3.9–10 mmol/L), Time Above Range (TAR) and Time Below Range (TBR:<3.9 mmol/L). The cohort included 65 patients with a mean age of 40.7 years; 45 (69%) were female. Following AHCL,TIR increased from 47.3% to 72.6%, representing an absolute improvement of 25.3%. TAR >10 mmol/L decreased from 29.4% to 19.8%,TAR >13.0mmol/L decreased from 21.4% to 12.7%. Hypoglycaemia exposure remained stable, with mean TBR changing from 1.44% to 1.58% (absolute change +0.14%). In this Irish cohort, AHCL implementation within routine clinical practice led to rapid and substantial improvements in

glycaemic control without increasing hypoglycaemia, highlighting the value of a structured diabetes technology service. The consistent benefit across multiple AHCL platforms suggests that the improvement reflects not only device performance but also effective service delivery and patient support in translating technology into meaningful clinical outcomes.

P67 High prevalence of "List B" continuous glucose monitoring (CGM) sensor use at Cork University Hospital – results of a cross-sectional audit

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Continuous glucose monitoring (CGM) is the recommended standard of care for adults living with type 1 diabetes (T1DM). Of the Dexcom® CGM products, the Medicines Management Programme recommends the "List A" ONE+ for non-insulin pump users. The higher-cost "List B" G6 and G7 sensors are compatible with insulin pump therapy, and provide predictive low glucose alerts for those with impaired awareness of hypoglycaemia (IAH). This audit evaluated Dexcom CGM prescribing practices at our center. A cross-sectional audit was performed of active CGM users registered on the Dexcom CLARITY platform at Cork University Hospital in April 2026. Demographic and clinical data was collected. Descriptive and comparative analyses were performed. Data from 653 CGM users was analysed, with mean age 41.2 years (SD 16.9). G7 was the most prescribed sensor (78%, 509/653), followed by ONE+ (18%, 117/653) and G6 (4%, 27/653). 22% (142/653) were using insulin pump therapy, 77% (503/653) multiple daily injections (MDI), and 1% (8/653) were not using insulin. Hypoglycaemia awareness was not documented for 24% (159/653). Of the 536 using G6/G7, 28% (149/536) were using, or awaiting, insulin pump therapy. 11% (58/536) had documented IAH. 63% (340/536) of G6/G7 users were not using insulin pumps, and did not have documented plans for pump therapy or documented IAH. This audit has revealed a high proportion of Dexcom G6/G7 users who may be eligible to transition to ONE+, representing a potentially significant cost saving to the healthcare system.

P68 Impact of a Clinical Aid on Adherence to Hyponatraemia Investigation Guidelines: A Re-Audit in an Acute Hospital.

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Hyponatraemia (serum sodium <135 mmol/L) is the most common electrolyte disorder in hospitalised patients. Accurate diagnosis requires appropriate biochemical investigation in accordance with European Society of Endocrinology (ESE) guidelines. Aim:To assess adherence to ESE guideline-recommended investigations following implementation of a clinical aid for the diagnosis and management of hyponatraemia at Sligo University Hospital (SUH). Methods: A re-audit of all hospital admissions over a two-week period was conducted. Pregnant patients, day-case presentations, paediatric patients, and those with end-stage kidney disease on haemodialysis were excluded. Hyponatraemia was classified as mild (130–135 mmol/L), moderate (125–129 mmol/L), or severe (<125 mmol/L). Adherence to recommended investigations (serum osmolality, urine osmolality, urine sodium, thyroid function tests [TFTs], and cortisol) was assessed. Results: Of 503 admissions, 118 (23%) patients had hyponatraemia. Mean age was 69 years, 43% were female, and 76% were admitted under medical teams. Hyponatraemia was mild in 73%, moderate in 21%, and severe in 6%. TFTs were performed in 47% of patients, cortisol in 19%, serum osmolality in 16%, urine osmolality in 15%, and urine sodium in 14%. Compared with the previous audit, testing for TFTs and cortisol improved, while urine sodium and osmolality investigations remained consistently low. Conclusion: Although targeted interventions improved adherence for TFT and cortisol testing, overall compliance with ESE recommendations remains poor. Further education and wider implementation of the hyponatraemia pro forma are required to improve diagnostic evaluation and optimise patient management.

P69 Adherence to Calcium and Vitamin D Supplementation Recommendations in Patients with Multiple Myeloma Receiving Zoledronic Acid: A Beaumont Hospital Audit

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Multiple myeloma is frequently complicated by osteolytic bone disease, for which intravenous zoledronic acid reduces skeletal-related events. The International Myeloma Working Group recommends baseline calcium and 25-hydroxyvitamin D assessment, correction of vitamin D deficiency, and calcium and vitamin D supplementation unless contraindicated. This point-prevalence clinical audit assessed adherence to these recommendations in Beaumont Hospital. Twenty consecutive adults with multiple myeloma receiving zoledronic acid in the haematology day unit were included; patients with active hypercalcaemia were excluded. Medication prescriptions, laboratory results and medical records were reviewed. Compliance with predefined audit standards was summarised using descriptive statistics as proportions and percentages. Baseline adjusted calcium was measured in 20/20 patients (100%), meeting the audit standard. Baseline 25-hydroxyvitamin D was measured in 3/20 patients (15%). One patient had documented vitamin D deficiency but did not receive loading therapy before zoledronic acid initiation (0/1, 0%). Calcium supplementation was prescribed in 6/20 patients (30%), while vitamin D supplementation was prescribed in 1/20 patient (5%). Only 1/20 patients received both calcium and vitamin D supplementation in accordance with guidance. This audit demonstrates excellent compliance with baseline calcium monitoring but marked gaps in vitamin D screening, correction of deficiency and routine supplementation among patients with multiple myeloma receiving zoledronic acid. Targeted interventions, including a zoledronic acid prescribing checklist, routine inclusion of 25-hydroxyvitamin D in baseline and annual blood panels, and staff education, are required. Re-audit is planned following implementation.

P70 Closing the Loop – A Re-audit of Systemic Steroids Monitoring and Management in Inpatients

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Background: Following our May 2024 audit, we conducted a re-audit to assess glycaemic monitoring of inpatients receiving systemic steroids and management of stress-dose steroids during acute hospital admissions. Since the 2024 audit, education sessions on management of inpatients on systemic steroids were delivered to support continued improvement in care. Methods:A one-day cross-sectional study was conducted in adult medical, surgical, and critical care wards at Midland Regional Hospital Portlaoise in June 2026. Results:Eight of 71 inpatients (11%) were receiving systemic steroids, including two with pre-existing diabetes. Systemic steroids prescribed were oral fludrocortisone (n=1), oral prednisolone (n=5), and intravenous hydrocortisone (n=2). The main indications were acute COPD exacerbation (3/8) and lower respiratory tract infection (2/8), with rheumatoid arthritis, adrenal insufficiency, and acute gout each accounting for one case. Capillary blood glucose (CBG) monitoring was not performed in patients without diabetes. Of the two patients with type 2 diabetes, one had appropriate four-times-daily CBG monitoring; the other developed hyperglycaemia of 10.4 mmol/L. Three of the inpatients were on long-term steroid therapy prior to admission. Two of three patients on long-term steroids received stress-dose steroids during acute illness. Conclusion: Compared with 2024, the re-audit in 2026 demonstrated CBG monitoring for inpatients receiving systemic steroids remains suboptimal, although stress-dose steroid prescribing in patients on long-term systemic steroids improved. The limited impact of educational intervention alone highlights the need for system-level measures, such as kardex prompts, ward-based visual reminders, and electronic prescribing, to improve clinical practice.

P71 Weight Gain Over a Decade in Adults with Type 1 Diabetes Mellitus: A Single-Centre Retrospective Audit

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Weight gain following diagnosis of type 1 diabetes mellitus (T1DM) is clinically significant yet understudied. This retrospective single-centre audit reviewed electronic medical records of adults with T1DM diagnosed between 1982 and 2016 (n=99; 54% female; multiple daily injections [MDI] n=68, continuous subcutaneous insulin infusion [CSII] n=29). Weight at diagnosis, five, and ten years; glycated haemoglobin (HbA1c) at five and ten years; insulin modality; continuous glucose monitoring (CGM) use; glucagon-like peptide-1 receptor agonist (GLP-1 RA) use; and comorbidities were recorded. Weight gain was defined as weight at ten years minus weight at diagnosis; HbA1c trend as HbA1c at ten minus five years. Descriptive statistics were used. Of 90 participants (91%) with complete weight data, mean weight increased from 76.1 ± 15.6 kg at diagnosis to 82.3 ± 17.2 kg at ten years (mean gain 6.8 ± 9.1 kg; median 5.4 kg; interquartile range [IQR] 0.3–14.0 kg). Overall, 76.7% gained weight; 52.2% gained ≥5 kg and 36.7% gained ≥10 kg. Weight gain was greater in males (7.9 ± 9.1 kg) than females (5.8 ± 9.1 kg). HbA1c improved from 67.9 ± 13.9 to 64.3 ± 11.8 mmol/mol (mean change −3.9 ± 14.5 mmol/mol).

CGM use was 58.5% and GLP-1 RA was prescribed in 8.4%. Hypothyroidism was present in 32.3%, polycystic ovary syndrome (PCOS) in 21.2% of females, and coeliac disease in 27.1%. Weight gain affects the majority of adults with T1DM over ten years, exceeding 10 kg in over one third despite glycaemic improvement, supporting proactive weight management including GLP-1 RA use.

P72 A Rapid-Access Endocrinology Pathway to Support Safe Emergency Department Discharge

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Introduction: Patients presenting to St James' hospital Emergency Department (ED) with urgent diabetes or endocrine conditions were traditionally admitted for specialist review or discharged to seek outpatient referral. In late 2025, a rapid-access endocrinology referral pathway was introduced to facilitate safe discharge of clinically stable patients requiring expedited specialist assessment. Methods: A retrospective audit of ED attendances triaged as diabetes-related between March and May 2025 established baseline admission rates. Following implementation of the rapid-access pathway, a re-audit of ED attendances during the same period in 2026 was performed. Results: Between March and May 2026, 23 patients were referred via the rapid-access pathway (19 diabetes-related, 4 thyroid-related). Five referrals were excluded as inappropriate, leaving 18 patients managed through the pathway. Eleven would otherwise have likely required hospital admission. With a mean inpatient stay of 9.7 days, this equated to a potential saving of 106.7 bed days over the 3-month period. The remaining seven patients received expedited outpatient review, with a median waiting time of 4.5 days. During the audit period, 93 patients presented to the ED with diabetes-related conditions. 11.8% were discharged via the rapid-access pathway, while 45.2% were admitted, representing a reduction in admission rate from 51.7% in 2025. A further four admitted patients were suitable for the pathway, suggesting admission rates could have been reduced further with optimal utilisation. Conclusion: The rapid-access pathway enabled timely specialist review while resulting in a small reduction in hospital admissions. Improved utilisation of the pathway could further reduce admissions and improve patient flow.

P73 Audit of Adherence to Continuous Glucose Monitor (CGM) Prescribing Following Introduction of Preferred CGM Systems Guidance

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Continuous glucose monitoring (CGM) systems are reimbursed in Ireland via the Community Drug Schemes, with escalating expenditure noted prior to 2023. In response, reimbursement was restricted to individuals with type 1 diabetes only, through a mandatory centralised prior-approval process. In July 2024, the HSE Medicines Management Programme (MMP) introduced guidance outlining preferred CGM systems to support cost-effective prescribing. We developed a prescribing support tool and audited compliance with the MMP guidance across outpatient diabetes clinic attendances at our hospital over a 30-day period. Data collected included diabetes subtype, baseline CGM use including model and adherence to prescribing guidance. Data from 214 of 268 clinic attendances was available for inclusion. Diabetes subtype included type 2 (n=127, 58.1%), type 1 (n=77, 34.8%) and other subtypes (n=10, 7.6%). Insulin pumps were used by 11.2% (n=24). Overall, 30.4% (n=65) were CGM users, with 83.1% (n=64) of attenders with type 1 diabetes using CGM. Baseline CGM model prescribed was Dexcom G7 (41.5%), Dexcom One+ (21.5%), Guardian 4 (18.5%), Libre 2 (16.9%), and Simplera (1.5%). When pump users were excluded, among the remaining 41 eligible CGM users, preferred CGM system prescription at baseline exceeded that of non-preferred (61.0% vs. 39.0%). Following review, 3 of 16 of non-preferred system users (18.8%) were prescribed a preferred alternative. Rationale for deviation from preferred guidance was unfortunately not recorded in 12/13 patients (92.3%). All newly initiated CGM users (n=8) received preferred systems. This audit demonstrates scope to improve adherence to MMP guidance.

P74 An audit on the compliance of the "Hypo Box" in a model 3 hospital.

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The Hypo Box was introduced in the UK in the early 2000s to reduce risk and improve hypoglycaemia management by enabling rapid access to treatment resources. We audited compliance with Hypo Box stocking in Mayo University Hospital (MUH) as per Joint British Diabetes Societies (JBDS) 2023 inpatient hypoglycaemia guidelines. Data collected from inpatient wards in MUH using a standardized audit tool to assess the presence of Hypo Boxes and their contents in line with JBDS recommendations. Of 15 wards audited, 8 had a Hypo Box, only 5 displayed the hypoglycaemia treatment algorithm. All 8 wards stocked glucoseLift. Within 7 wards without Hypo Boxes, 6 stocked glucoseLift locally, 1 ward did not stock it. Dextrose tablets were present in 4 Hypo Boxes and in 2 wards without boxes. No hypo boxes contained dextrose 10%; one ward stocked it locally. One ward stocked dextrose 20% 100mls, stocked in the Hypo Box. One ward had no IV dextrose. Glucagon was available in 13 wards, 1 stored it in the Hypo Box with an expiry label; remaining 12 stored in drug fridges. No ward stocked a cannula/giving set in the Hypo Box. No ward in MUH was compliant with JBDS Hypo Box guidelines. Limited availability of dextrose 20% 100mls, partly due to cost, was identified. Governance updates have been implemented, and a repeat audit is planned.

P75 Development of a National Diabetes Registry for Ireland through secondary use of administrative health datasets

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The prevalence and incidence of diabetes in Ireland are currently unknown limiting healthcare planning and policymaking. We aim to develop a National Diabetes Registry (NDR) using existing health data sources. Phase 1 of NDR development will involve using 3 datasets already available within the HSE Integrated Information Services (IIS) data lake; these are Primary Care Reimbursement Service (PCRS), Hospital In-Patient Enquiry (HIPE), and Integrated Patient Management System (iPMS). Linkage between datasets will be enabled by the Individual Health Identifier (IHI). To avoid overcounting individuals (duplicates) and address other data quality issues, data quality checks and pre-processing rules will be implemented. Diabetes-specific Anatomical Therapeutic Chemical (ATC) codes will be used to identify individuals with diabetes in PCRS data, while diabetes-specific ICD-10-AM codes will be used to identify diabetes-related discharges in the HIPE dataset. The iPMS dataset will support demographic data collection and enable the assessment of deprivation scores based on geocoding. Lack of information on diabetes classification in datasets will be resolved by developing data-driven, rule-based algorithms based on use of glucose-lowering medication and devices. Later phases of NDR development will include Diabetic RetinaScreen data, laboratory data and chronic disease management returns from General Practitioners; these datasets are not currently in the HSE IIS data lake. The NDR will be the first large scale population-based registry developed entirely within the HSE. As well as providing important diabetes-specific information for policymakers, healthcare practitioners and people living with diabetes, it will also inform future development of chronic disease data systems in Ireland.

P76 Inpatient Diabetes Care: Findings from A Point Prevalence Audit

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Background: This audit aimed to determine burden of diabetes among adult inpatients at Midland Regional Hospital Portlaoise and to characterise associated inpatient care needs. Methods: A cross-sectional study was undertaken across adult medical, surgical wards and critical care unit. Patients with established or newly diagnosed diabetes were identified and data was collected on demographics, diabetes type, glycaemic events, glucose monitoring, HbA1c availability, medication discrepancies, insulin rescue therapy, diabetes-related admissions, length of stay and specialist diabetes team review. Results: Of 77 adult inpatients surveyed, 19 had diabetes, representing 25% of occupied beds. Median age of inpatients with diabetes was 75 years (IQR 67–82), 10 were male (52.6%). Type 2 diabetes accounted for 18 cases (94.7%) and Type 1 diabetes for 1 case. Hyperglycaemia (>10 mmol/L) occurred in 7 patients (36.8%), while hypoglycaemia (<4 mmol/L) occurred in 4 (21.1%). Blood glucose monitoring was documented in 15 patients (78.9%) and recent HbA1c was available in 9 (47.4%), with median

HbA1c 54mmol/mol (IQR 39–67). Medication discrepancies were identified in 3 patients (15.8%) and 6 (31.6%) required rescue sliding-scale insulin. Diabetes-related conditions accounted for 3 admissions (15.8%) including 2 newly diagnosed cases. Median length of stay was 5.5 days (IQR 3–7). Specialist diabetes review was sought for 8 patients (42.1%). Conclusion: One in four adult inpatient beds was occupied by a person with diabetes, with frequent dysglycaemia and specialist care requirements. These findings support continued evaluation and strengthening of inpatient and integrated diabetes services to improve safety and outcomes.

P77 National Trends of Diabetic Ketoacidosis in Ireland 2005-2022

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Diabetic ketoacidosis (DKA) is an acute complication of diabetes mellitus characterised by hyperglycaemia, ketosis and metabolic acidosis. The epidemiology of DKA in Ireland is unknown, limiting the development of effective prevention and management strategies. This study describes trends of DKA in people with type 1 and type 2 diabetes admitted to Irish hospitals between 2005 and 2022. Data were obtained from the Hospital InPatient Enquiry (HIPE) database. All discharges with a diagnosis of DKA (ICD-10 codes E1011-E1016, E1111-E1116, E1211 and E1311) from 2005 - 2022 were included. Poisson regression models, stratified by diabetes type, age and sex, were used to assess trends over time. Overall, there were 32871 hospitalisations with DKA in Ireland between 2005 and 2022 which increased from 1006 in 2005 to 2762 in 2022. The majority (66.4%) occurred in those with type 1 diabetes. The age category with the highest rate of DKA was 20-44-year olds (34%). The largest increase was observed among people with type 2 diabetes, with a six-fold increase over the study period (6.2, 95% CI 5.3-7.3) compared to a two-fold increase in people with type 1 diabetes (1.85, 95% CI 1.7-2.0). There was a 5.1% in-hospital mortality associated with DKA (n=1677) across the study period. Although DKA was more common in people with type 1 diabetes, the greatest increase over time occurred in older people with type 2 diabetes. As diabetes prevalence and life expectancy continue to rise, the prevention and management of DKA needs to be prioritised for future service planning.

P78 Availability and Documentation of Urine Albumin-to-Creatinine Ratio and HbA1c Results in Patients with Type 2 Diabetes Attending an Integrated Chronic Disease Programme in Dublin

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Early detection of diabetic kidney disease through urine albumin-to-creatinine ratio (ACR) testing and regular monitoring of HbA1c are important parts of type 2 diabetes care. Adherence to national (ICGP Integrated Type 2 Diabetes Care) and international (ADA Standards of Care) guidance helps to reduce long-term complications. This audit aimed to assess the availability and documentation of ACR and HbA1c results in patients attending an integrated chronic disease programme. We performed a retrospective review of new patients with type 2 diabetes attending the Integrated Care Programme between 1 June and 31 August 2025. Data were collected between 16 September and 31 October 2025. Electronic medical records and laboratory systems were reviewed to determine whether ACR (within 12 months) and HbA1c (within 6 months) had been completed and appropriately documented. 36 patients were included. ACR testing was completed in 21 patients (58.3%). 10 patients (27.8%) had ACR requested but no result available at review. Documentation of ACR results was low, with only 2 (6%) having results recorded, and a substantial proportion lacking clear documentation. HbA1c monitoring demonstrated higher levels of adherence, with 32 patients (89%) having a recent HbA1c recorded within 6 months and documentation rates matching completion. While HbA1c monitoring was generally in line with recommended standards, gaps were identified in follow-up and documentation of ACR testing. These findings suggest a need to review processes to ensure results are consistently available and recorded. Targeted workflow improvements and repeating the audit cycle will be important to support safe and effective diabetes care.

P79 Outcomes of a National Cohort of 540 Pregnancies in Women with Pre-gestational Type 1 and Type 2 Diabetes: 2023–2024

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Pre-gestational diabetes mellitus is associated with increased maternal and neonamorbidity. Despite advances in diabetes technologies and antenatal care, pregnancy outcomes remain suboptimal. We report contemporary national outcomes in women with type 1 and type 2 diabetes in Ireland. A retrospective multicentre cohort study was conducted across national antenatal diabetes services (2023–2024). Data included maternal characteristics, diabetes management, pregnancy preparation, and neonatal outcomes. A total of 540 pregnancies were included: 291 (53.9%) in women with type 1 diabetes and 219 (40.6%) with type 2 diabetes. Mean maternal age was 33.6 ± 4.9 years, BMI 30.3 ± 7.3 kg/m², and first-trimester HbA1c 51.5 ± 15.0 mmol/mol. Pre-pregnancy care was attended by 19% (n=79), while 46.3% (n=250) received preconception folic acid. Insulin pump therapy was used by 13.5% (n=67) and continuous glucose monitoring by 55.7% (n=291). Livebirth, miscarriage, and stillbirth rates were 85.7%, 0.6%, and 0.6%, respectively. Among 289 pregnancies with available neonatal data, 37.4% of infants were large for gestational age, congenital anomalies occurred in 35 per 1000 births, 33.4% required SCBU admission, and 13.9% were treated for neonatal hypoglycaemia. Large-for-gestational-age infants were more common in type 1 than type 2 diabetes (46.8% vs 25.0%, p=0.001) however; congenital anomaly rates were similar (3.7%). Pregnancy outcomes in women with pre-gestational diabetes remain suboptimal despite advances in antenatal care and diabetes technologies. Limited engagement with preconception care and persistent adverse neonatal outcomes highlight the need for targeted strategies to improve glycaemic optimisation and pregnancy outcomes.

P80 Addressing the missing piece: embedding psychology in an Irish adult diabetes service

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Psychological support is recognised as a core component of diabetes care, addressing the emotional burden of living with diabetes. However, access to embedded psychology support within Irish diabetes services remains limited. Our adult Level 3 acute specialist ambulatory care diabetes service includes 0.25 WTE Senior Clinical Psychologist. Here we describe the integration of clinical psychology in the multidisciplinary (MDT) service and evaluate referral patterns.A structured care pathway was implemented to embed psychology within the diabetes service, including referral processes and integration with MDT workflows. Referral data from July 2025–2026 were retrospectively audited using Microsoft Excel. Data collected included referral numbers, referral reasons, demographics, and patient pathways. During the study period, 16 patients were referred (9 female; mean age 40 years), with an average wait of 7 weeks for initial appointment. Referrals spanned 5 categories including diabetes distress, eating problems, fear of hypoglycaemia, and pre-conception planning. The psychologist provided assessment, formulation, evidence-based interventions, and signposting, with patients offered an average of 6 appointments. The pathway also includes a psychology-led monthly MDT meeting, complex case reviews, clinical decision-making support, and MDT upskilling within a stepped-care model. Embedding psychology within an adult diabetes service is feasible and addresses a significant unmet need in supporting emotional health. Integration with existing MDT structures and clear care pathways support effective collaboration and sustainability. Expansion of psychology provision is essential to deliver patient-centred holistic diabetes care aligned with national policy.

P81 Anti-Thyroglobulin Antibody Trends During Surveillance of Differentiated Thyroid Cancer (DTC)

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High-sensitivity thyroglobulin (Tg) immunoassays are the primary biochemical tumour marker for differentiated thyroid cancer (DTC) surveillance. Because anti-thyroglobulin autoantibodies (Anti-TgAb) cause falsely lower Tg and may mask recurrence, guidelines recommend co-measuring Anti-TgAb with every Tg request. We retrospectively reviewed Anti-TgAb trends in patients with DTC treated by total thyroidectomy and radioactive iodine at Mater Misericordiae University Hospital. Demographic, clinical, imaging and laboratory data were collected for samples referred for Tg analysis between 16/4/24 and

16/5/25. Patients with detectable Tg were excluded because Anti-TgAb interference is most relevant when Tg is undetectable, where antibody-mediated negative interference could mask biochemical evidence of recurrence. Of 55 patients included, 81.8% (45/55) were female, mean age was 48.7years (standard deviation 14.9years). Papillary thyroid carcinoma accounted for 96.4% (53/55) of cases, follicular thyroid carcinoma for 3.6% (2/55). At least one positive Anti-TgAb result was identified in 63.6% (35/55) of patients during the study period. Positive Anti-TgAb values ranged from 15.0-279.8IU/mL, median 19.2IU/mL (reference range, <15IU/mL). Recurrent disease was identified in only 5.7% (2/35) of patients with undetectable Tg and positive Anti-TgAb, at 35.4 and 261IU/mL respectively. Twenty-one patients had serial Anti-TgAb measurements; eight demonstrated rising Anti-TgAb levels (peak ≤17.6IU/mL), none with evidence of recurrence. In conclusion, Anti-TgAb positivity in our assay was common during DTC surveillance, with concentrations overlapping between patients with and without recurrence. Serial measurement did not alter management, and the risk of recurrence in this group was low.

P82 Does Analytical Detectability Equate to Clinical Significance? A Service Evaluation of Anti-Thyroglobulin Antibody Reporting Thresholds in Differentiated Thyroid Cancer

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Anti-thyroglobulin autoantibodies (Anti-TgAb) interfere with thyroglobulin (Tg) immunometric assays and are measured during differentiated thyroid cancer (DTC) surveillance. Roche revised the Elecsys Anti-TgAb limit of quantitation (LoQ) from 10 to 15IU/mL. However, several thyroid cancer centres continue to regard 22IU/mL as the threshold for clinically significant Tg assay interference. We verified the revised LoQ and evaluated whether reporting Anti-TgAb positivity at 15IU/mL or 22IU/mL altered patient classification or detection of recurrent disease. Analytical performance at the revised LoQ was verified according to CLSI recommendations (EP17-A2). Anti-TgAb results from patients with DTC and undetectable Tg (samples referred 16/4/24–16/5/25) were stratified as <15, 15–22, or >22IU/mL and cross-referenced with clinical outcome. The revised LoQ was verified within-laboratory CV <4%, remaining <4% to approximately 30IU/mL (Manufacturer's predefined criterion ≤20%). Of 55 patients, 35 (63.6%) were Anti-TgAb positive using the 15IU/mL threshold compared with 13 (23.6%) using 22IU/mL, reclassifying 22 patients. Recurrent disease occurred only in two patients with Anti-TgAb concentrations >22IU/mL (35.4 and 261IU/mL). Eight patients demonstrated rising serial Anti-TgAb concentrations, all remaining below 22IU/mL (maximum 17.6IU/mL), with no evidence of structural recurrence. Although the revised LoQ was analytically robust, low-level Anti-TgAb positivity between 15 and 22IU/mL was not associated with recurrent disease in this cohort. These findings suggest that analytical detectability does not necessarily equate to clinical significance and support further evaluation of the optimal reporting threshold for Anti-TgAb in DTC surveillance.

P83 Assessing biochemical investigation of hyponatremia in an oncology population in the five years prior to diagnosis with primary malignancy.

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Background: Hyponatraemia is the most common electrolyte abnormality in hospitalised patients. As Syndrome of Inappropriate Antidiuresis (SIAD) may represent the first manifestation of an occult malignancy, guidelines recommend comprehensive biochemical investigation to establish the underlying aetiology. Methods: A retrospective audit was conducted of all patients diagnosed with a primary malignancy at Sligo University Hospital between 1st January and 31st December 2024. Patients with documented hyponatraemia (serum sodium <135 mmol/L) in the preceding five years were identified. Electronic records were reviewed for biochemical investigations. A complete biochemical evaluation included paired serum and urine sodium and osmolality, thyroid function tests, and early morning serum cortisol. Results: Of 146 patients diagnosed with a primary malignancy, 24 (16.4%) had documented hyponatraemia in the preceding five years. No patient had a complete biochemical evaluation. Five patients (20.8%) underwent a partial biochemical evaluation (paired serum and urine sodium and osmolality); three demonstrated biochemical features consistent with SIAD and went on to be diagnosed with non-small cell lung cancer, ovarian cancer, and metastatic melanoma. Partial investigation was performed in 10% of patients with mild hyponatraemia (130-134mmol/L), 0% with moderate hyponatraemia (125-129mmol/L), and 57% with severe hyponatraemia

(<125mmo/L). Conclusion: Adherence to guideline-recommended biochemical investigation of hyponatraemia was poor. Failure to perform a complete biochemical assessment may delay recognition of SIAD and reduce opportunities for timely investigation of occult malignancy. Improved clinician awareness and implementation of a standardised local hyponatraemia investigation pathway may facilitate earlier recognition of SIAD and more timely diagnosis of malignancy-associated hyponatraemia.

P84 Auditing detection rates of late-onset gestational diabetes mellitus using one week of finger prick glucose monitoring.

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The aim of this audit was to determine the detection rate of late-onset gestational diabetes mellitus (GDM) and associated perinatal outcomes in women with normal mid-pregnancy screening who underwent a minimum of one week of glucose monitoring (using criteria from All Wales Maternity & Neonatal Network Guidelines) as foetus was large for gestational age (LGA), or polyhydramnios or glycosuria were present. Due to local service issues, timely oral glucose tolerance testing (OGTT) was not available for this group. Late-onset GDM was diagnosed in 20% of women with normal mid-pregnancy screening. Isolated/combined LGA and polyhydramnios were the most common indicators for re-screening yielding a result of GDM. Of those diagnosed with late-onset GDM, 44% were managed with diet, 11% were managed with pre-prandial insulin and 46% were managed with long-acting insulin. All women diagnosed with late-onset GDM whether managed with diet or insulin delivered pre-term. 37% were delivered by emergency caesarean section (ECS). There were two neonatal intensive care unit (NICU) admissions from this group. Of the women who were re-screened but negative, 33% were delivered post-dates with 54% being delivered by ECS. There were no NICU admissions from this group. To conclude, diagnosis rates of late-onset GDM were in keeping with figures seen in the literature. Significant resources are required to re-screen women for late-onset GDM, especially in the absence of timely OGTT. Perhaps dietary management of all women with LGA would be a more practical and cost-effective approach compared to re-screening when timely OGTT is not available.

P85 Clinical Audit: Screening for Thyroid Disorders and Coeliac Disease in T1 Diabetics

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In 2025, Type 1 Diabetes Mellitus (T1DM) affected 9.5 million people worldwide, with 26 326 individuals in Ireland. T1DM is an autoimmune disorder, hence leading to a higher risk of developing other autoimmune conditions such coeliac disease (CD) and autoimmune thyroid disorders (AITD) - Graves' disease and Hashimoto's thyroiditis. Timely screening for CD and regular thyroid function (TFT's) are essential for early detection and management of such.NICE guidelines (2015) advices for yearly TFTs follow-up and CD screening at diagnosis, and repeat testing if symptoms arise. Our aim was to assess the compliance to the guidelines by determining the proportion of patients who had yearly TFT's levels and/or were tested for CD in SUH. Five years (2020-2025) of retrospective data were collected, the sample consisted of 650 T1DM patients. 7.5% had a concurrent autoimmune diagnosis (3.2% with AITD, 3.39% with CD and 0.92% with other autoimmune conditions). Yearly TFT's were performed in 55.5% of patients, while in 44.5% weren't; notably, 10.77% had never done TFT's. 89.66% of the TFT's were within normality ranges. CD screening had only been done in 36.2% of patients. Compared to previous audit (2019), yearly TFT's increased from 51% to 55.5% and CD screening from 34% to 36,2%. This showing slight improvement, but still suboptimal compliance with guidelines. Major audit limitations were: patients getting the tests recommended outside of SUH capture area; and poor clinic attendance. We have planned education sessions, with a follow-up re-audit.

P86 Diabetes Clinic Performance against National Committee for Quality Assurance standards

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The United States National Committee for Quality Assurance (NCQA) Diabetes Recognition Program provides clinicians with an outcome and process measure framework to support delivery of high-quality care to patients with diabetes. 184 consecutive adult attendances at University Hospital Limerick's diabetes clinic between January and March 2026 were audited against NCQA standards. 34% of patients had a HbA1c <64mmol/mol (target ≥65%) and 34% of patients had a HbA1c >75mmol/mol

(target ≤15%). Continuous glucose monitoring (CGM) devices were utilized by 61% of patients. 83% of those with type 1 diabetes used CGM. 48% had a blood pressure reading ≥140/90mmHg (target ≤35%). 65% of patients were on treatment with a statin. 20% of patients had an LDL <1.8mmol/L. 52% of patients had a urinary ACR in the last year (target ≥ 85%). Foot examination and eye examination met NCQA standards, with 90% of patients undergoing foot screening in the last year (target ≥80%) and 62% undergoing eye examination in the last year (target ≥60%). 82% of patients had smoking status documented (target ≥85%). 76% of patients were asked about a history of depression but none had a follow-up plan documented. Several outcome and process measures fell short of NCQA standards. Focusing on glycaemic control between visits, smoking and depression interventions are identified as priorities our next audit cycle.

P87 Inpatient Diabetes Management: A Clinical Audit of Glycaemic Control, Glucose Monitoring and Insulin Prescribing Against JBDS-IP Standards

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Inpatient diabetes management is a high-risk aspect of care associated with morbidity, prolonged hospitalisation and higher healthcare costs when suboptimal. The Joint British Diabetes Societies for Inpatient Care (JBDS-IP) provides evidence-based recommendations for glycaemic targets, glucose monitoring and insulin prescribing. We performed a retrospective audit to evaluate insulin prescribing, glucose monitoring and glycaemic control in inpatients with diabetes and those receiving systemic corticosteroids. Data were collected over two days in March 2026 from adults admitted for >24 hours with diabetes or receiving systemic corticosteroids, using clinical and prescribing records from the preceding 24 hours, and audited against JBDS-IP standards. Of 48 patients with diabetes, 34 (70.8%) had HbA1c measured within the preceding three months. Among patients receiving insulin, 11/12 (91.6%) underwent at least four capillary blood glucose measurements daily. In contrast, monitoring of steroid-induced hyperglycaemia was inadequate, with only 5/20 (25%) patients receiving at least one daily glucose measurement. Insulin prescriptions met recommended standards for dose and brand documentation in all cases (12/12, 100%), although administration timing was documented in only 10/12 (83%). Of 178 blood glucose measurements, 51% were within target range (6–10mmol/L), 75.8% within the acceptable range (4–12mmol/L), 24.2% demonstrated hyperglycaemia (>12mmol/L), and no episodes of hypoglycaemia (<4mmol/L) were recorded. These findings demonstrate suboptimal inpatient glycaemic management, characterised by frequent hyperglycaemia and inadequate monitoring, particularly in patients receiving corticosteroids. Dedicated inpatient diabetes review rounds, standardised monitoring protocols and targeted multidisciplinary education may improve glycaemic control and patient safety.

P88 Gonadectomy in Paediatric Differences of Sex Development: A 26-Year National Cohort Study of Clinical Practice and Incidence of Gonadoblastoma

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Gonadectomy remains a complex aspect of care for individuals with differences of sex development (DSD). Advances in genetic diagnosis, improved understanding of gonadal malignancy risk, and increasing emphasis on multidisciplinary shared decision-making have transformed clinical practice. Current data describing gonadectomy practice and gonadoblastoma incidence remain limited. We aimed to describe clinical characteristics of patients with DSD undergoing gonadectomy, evaluate historical and current practice, and determine the incidence of gonadoblastoma. A retrospective-prospective observational cohort study was conducted at Children's Health Ireland, the national referral centre for paediatric DSD, between 1999-2025. Patients were identified through clinical, genetic, and histopathology records, supplemented by prospectively collected Sex Development and Maturation (SDM) Registry data. Descriptive statistics summarised patient characteristics. Gonadoblastoma incidence was estimated with 95% confidence intervals. Groups were compared using the Mann–Whitney U test. Sixty-nine patients underwent gonadectomy; 54 (78%) females. Tumour risk reduction was the commonest indication (42/69, 60%). Females underwent gonadectomy at an older age than males (median 10.3 years [IQR 2-16] vs 3.0 years [IQR 1.6–3.8]; p=0.017). Among 66 patients with Y chromosome material, gonadoblastoma occurred in 21 (31.8%) (95% CI: 20.9–44.4%), most commonly in mixed gonadal dysgenesis (n=9) and complete gonadal dysgenesis (CGD) (n=7). Concurrent

dysgerminoma occurred in three patients with CGD. Most tumours were intra-abdominal (18/21, 86%). This national cohort demonstrates that tumour risk reduction is the predominant indication for paediatric gonadectomy in DSD. The high incidence of gonadoblastoma supports multidisciplinary risk assessment and individualised shared decision-making regarding prophylactic gonadectomy.

P89 Pancreatic enzyme replacement therapy (PERT) prescribing trends in Northern Ireland: analysis from 2014-2024

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Aim: We aimed to explore the prescribing patterns, summarise healthcare costs, and identify trends for pancreatin-containing products in Northern Ireland (primary care) from 2014 to 2024. Methods: Data were obtained from the Health and Social Care (HSC) Business Services Organisation (BS0) Pharmacy Payment System. Results: Total quantities of pancreatin products demonstrated a consistent upward trajectory between 2014 and 2024. Across the study period, Creon formulations (10,000, 25,000, and 40,000 gastro-resistant capsules) represented the majority of prescribing volume. Creon 25,000 capsules demonstrated the greatest growth, increasing from 852,009 units in 2014 to 6,919,176 units in 2024 (approximately an eight-fold increase). Creon 10,000 capsules showed a more modest increase from 848,303 units in 2014 to 1,436,133 units in 2024 (a 1.7-fold increase). Creon 40,000 capsules demonstrated the opposite pattern, with utilisation decreasing from 739,034 units in 2014 to 20,530 units in 2024 (a 36-fold decrease), suggesting a transition away from this formulation. Both Nutrizym and Pancrex V preparations demonstrated a general increase, although utilisation remained substantially lower than observed for Creon. Total gross expenditure on pancreatin products also rose markedly in the timeframe from approximately £0.70 million to £2.22 million representing a 217% increase. Conclusion: Over the past decade, primary-care utilisation of pancreatin products in Northern Ireland has increased substantially, driven predominantly by higher-strength Creon capsules. These trends underscore a growing clinical need for PERT and have implications for future resource planning and supply continuity

P90 The utility of baseline cortisol level in the assessment of adrenal function in suspected adrenal insufficiency

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The short Synacthen test (SST) is widely used to assess adrenal reserve but is resource intensive and often requires day ward attendance. Whether baseline cortisol can reliably predict a normal SST response remains uncertain, particularly with modern cortisol assays. This retrospective single centre audit evaluated whether baseline serum cortisol could predict SST outcome and identify patients likely to have a normal response. A total of 103 consecutive patients undergoing a first SST in Beaumont Hospital for various indications, with available baseline and 30-minute cortisol, were included. Adequate adrenal response was defined as 30-minute cortisol 420 nmol/L or greater using a locally derived threshold for the Roche cortisol assay. Baseline cortisol performance was assessed using receiver operating characteristic (ROC) analysis, with optimal threshold determined by the Youden Index. A secondary analysis identified a baseline cortisol threshold predicting a normal SST response with at least 95 percent positive predictive value (PPV). Overall, 63 (61.2%) passed and 40 (38.8%) failed the SST. Baseline cortisol demonstrated good discrimination for SST outcome, with area under the curve 0.858 and an optimal threshold of 113 nmol/L. A baseline cortisol threshold of 325 nmol/L predicted a normal SST response with at least 95 percent PPV. Baseline cortisol shows good predictive value for SST outcome and may help identify patients likely to have a normal response, supporting more selective SST utilisation when interpreted alongside clinical indication

P91 Starting as we hope to continue: developing a partnership strategy for the National Diabetes Registry

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Following many years of advocacy by Endocrinologists, Public Health Consultants and the charity, Diabetes Ireland, funding was made available in 2025 to develop a National Diabetes Registry (NDR) for Ireland. The initial challenges faced by the NDR team include establishing strong governance structures within the HSE and developing technical solutions to access diabetes-relevant data in large national datasets. When established, the NDR will be an organised system that collects, analyses and reports on data from people living with diabetes and the health services they use. The NDR team's vision is to embed meaningful partnership with people living with diabetes from the outset so they can share in the outputs and feel ownership of NDR reporting. The team began by co-developing a partnership strategy with people living with diabetes. In-person and online workshops were conducted with a diverse group of people living with diabetes, to explore how and where people with lived experience can be involved in the work of the NDR. Approximately 300 individual contributions were captured from 28 participants across 3 workshops. Participants expressed strong willingness and commitment to contribute to the NDR. A partnership strategy was drafted, reviewed by workshop attendees, revised and signed off by senior HSE leadership. This approach to co-development of a partnership strategy demonstrates a feasible model for embedding partnership in any new initiative within the HSE, highlighting the importance of non-tokenistic engagement. The NDR team is now implementing the NDR Lived Experience partnership strategy.

P92 A Review of Cardiovascular Risk in People with Charcot Foot Disease

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Background: Charcot neuro-osteoarthropathy is a high-risk diabetic foot condition in which peripheral arterial disease and cardiovascular comorbidity may influence ulceration, healing, revascularisation and amputation risk. This audit reviewed cardiovascular risk burden and vascular assessment in patients with Charcot foot disease. Methods: A retrospective audit was performed using 49 anonymised records of patients with Charcot neuro-osteoarthropathy reviewed between 2015 and 2025. Results: Median age was 70 years (IQR 63–76), 39/49 (79.6%) were male, 36/49 (73.5%), Type 2 diabetes. Median HbA1c was 58 mmol/mol. Hypertension and dyslipidaemia were both present in 46/49 (93.9%), known PAD in 17/49 (34.7%), CAD with stent in 9/49 (18.4%), heart failure in 6/49 (12.2%) and stroke/TIA in 5/49 (10.2%). Mean recorded BP was 136/73 mmHg. Mean total cholesterol was 3.75 mmol/L with an LDL subfraction of 1.72 mmol/L. Forty-two patients (85.7%) were on statin therapy and 37/49 (75.5%) were on ACE-inhibitor/ARB therapy. Diabetes therapy included insulin in 35/49 (71.4%), metformin in 22/49 (44.9%), SGLT2 inhibitor in 15/49 (30.6%) and GLP-1 RA in 14/49 (28.6%). Numeric bilateral ABPI was available in 24/49 (49.0%), mean ABPI 1.13 on the right and 1.15 on the left; abnormal vascular findings were present in 27/49 (55.1%) with peripheral revascularization recorded in 7/49 (14.3%). Conclusion: Patients with Charcot foot disease have substantial cardiovascular and PAD burden. A standardised cardiovascular and vascular assessment bundle should be embedded in the assessment of patients with Charcot foot disease with aggressive treatment of CV risk factors

Poster Case Reports/Case Series:

P93 Paraganglioma in adults with cyanotic congenital heart disease: a case series supporting a role for chronic hypoxia

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PPGL arising in younger patients is frequently associated with germline mutations affecting oxygen-sensing pathways, particularly VHL and SDHx, which promote tumourigenesis through HIF-mediated pseudohypoxic signalling. Chronic systemic hypoxia in cyanotic congenital heart disease (CHD) may activate similar pseudohypoxic pathways, potentially constituting an underrecognised PPGL risk factor. We retrospectively reviewed adults with cyanotic CHD and confirmed PPGL at a tertiary referral centre. Four patients were identified (median age 35 years; range 33–56; three female). Underlying diagnoses included complex single-ventricle physiology requiring Fontan circulation (n=2), left atrial isomerism with double outlet right ventricle and atrioventricular septal defect (n=1), and tricuspid atresia (n=1). Median resting oxygen saturation

was 83% (range 77–94%). Three patients developed retroperitoneal paragangliomas and one a bladder paraganglioma (size range 2.3–12 cm). Plasma normetanephrine was elevated in all patients (median 9,216 pmol/L; reference <1,180 pmol/L), consistent with a noradrenergic phenotype. Avid DOTATATE, FDG-PET and/or MIBG uptake was demonstrated in all cases. One patient had metastatic disease at diagnosis. Germline testing identified no pathogenic variants. The young age at diagnosis in the absence of germline variants mirrors hereditary pseudohypoxic syndromes. Given the considerable surgical complexity in this population, further research into the mechanistic link between chronic hypoxaemia and PPGL development in cyanotic CHD is warranted. Belzutifan, which demonstrates promising efficacy in somatic EPAS1-driven PPGL, represents a potentially valuable therapeutic option as a primary and adjunct therapy in this complex cohort should a mechanistic link be confirmed (1).

P94 Case Series: Semaglutide and progression of diabetic retinopathy in patients with diabetes mellitus.

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Glucagon-like peptide-1 (GLP1) receptor agonists, such as semaglutide, are commonly used in the treatment of type 2 diabetes mellitus (T2DM), with cardiometabolic and glycaemic benefits. Their usage in type 1 diabetes mellitus (T1DM) is also increasing. These agents have been described as transformative. Diabetic retinopathy (DR) remains a major cause of vision loss worldwide. An established association exists between rapid reduction in HbA1c and early worsening of DR. An association between Semaglutide exposure and DR in T2DM has been observed in clinical trials. Rapid HbA1c reduction has been postulated as the causative mechanism but the extent of the association is unclear. We present three cases with prior minimal DR who had clinically significant progression of retinopathy while on semaglutide. A 64-year-old gentleman with T2DM not on insulin (HbA1c 57 mmol/mol) who commenced semaglutide and uptitrated to 0.5mg weekly developed bilateral active moderative proliferative retinopathy 6 months later (HbA1c 50 mmol/mol). A 61-year-old gentleman with T2DM requiring insulin (HbA1c 64 mmol/mol) on semaglutide 1mg weekly developed unilateral active proliferative retinopathy (HbA1c 68 mmol/mol). A 42-year-old gentleman with T1DM (HbA1c 68 mmol/mol) and obesity who commenced semaglutide and increased to 1mg weekly developed bilateral pre-proliferative retinopathy 3 months later (HbA1c 56 mmol/mol). Our three cases demonstrate progression of DR associated with semaglutide therapy, largely without rapid HbA1c reduction. Further study is warranted to investigate the link and to assess other potential mechanisms. Medical management to support best eye care remains a tenant of diabetes reviews.

P95 Case Series: A Spectrum of Delayed Transformation of Well-differentiated Non-functional Pancreatic Neuroendocrine Tumours into Insulinoma

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Non-functional pancreatic neuroendocrine tumours (NF-pNETs) rarely acquire hormone secretion, and the mechanisms remain poorly characterised. We report four cases of NF-pNETs with delayed transformation to insulin-secreting tumours in distinct clinical contexts. All patients exhibited endogenous hyperinsulinaemic hypoglycaemia with elevated insulin, C-peptide and proinsulin during hypoglycaemia (glucose <3.0 mmol/L). Somatostatin receptor–positive uptake was demonstrated on functional imaging. An 88-year-old woman with a stable 1.1 cm NF-pNET developed neuroglycopenic symptoms without radiological progression and achieved glycaemic control with a somatostatin analogue following diazoxide intolerance. A 52-year-old woman with multiple endocrine neoplasia type 1 and multifocal NF-pNETs developed symptomatic hypoglycaemia after 8 years, requiring diazoxide and surgical debulking with partial biochemical response and disease stability. A 68-year-old woman with metastatic NF-pNET and insulin-dependent diabetes developed hypoglycaemia following chemotherapy and insulin withdrawal. Treatment with everolimus and peptide receptor radionuclide therapy (PRRT) resulted in biochemical improvement but with subsequent disease progression and death. An 83-year-old man with metastatic NF-pNET presented 24 years after diagnosis with severe hypoglycaemia and radiological progression despite prior octreotide, PRRT and liver embolisation. Functional transformation of NF-pNETs may occur after prolonged stability or therapy and may be missed if imaging alone is relied upon. New neuroglycopenic symptoms should prompt urgent biochemical reassessment.

P96 Case Report: Navigating the Challenges of Rapidly Cycling Cushing's Syndrome

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Cyclical Cushing's syndrome (CS) is characterised by fluctuating hypercortisolism, alternating with normal or hypocortisolaemic secretion. A 62-year-old female was referred with facial swelling, weight gain and mood lability over 18 months. Screening confirmed endogenous ACTH-dependent hypercortisolaemia with a 1mg dexamethasone suppression test of 524nmol/L (<50), 24-hour urinary free cortisol of 1213nmol/24h (<486) and ACTH of 66.1ng/L (7.2–63.1). Pituitary MRI identified a discrete 5mm intrasellar adenoma. The patient required an emergency admission for steroid-induced psychosis and was treated with metyrapone 250mg TDS and olanzapine. Consecutive morning cortisol values fluctuated: 186, 947, 142, 1,063nmol/L, confirming rapid cycling CS. A desmopressin-stimulated inferior petrosal sinus sampling (IPSS) was timed to coincide with a hypercortisolaemic peak, confirming a pituitary source with a central-to-peripheral ACTH ratio of 3:1. Given her fluctuating endogenous hypercortisolism, a medical block-and-replace regimen (metyrapone 750mg TDS; hydrocortisone 15mg) was initiated. Following transsphenoidal surgery, early morning cortisol concentrations ranged from 50–70 nmol/L. A synacthen test performed at 6 weeks confirmed adrenal insufficiency with a T0 and T30 of 54 and 154nmol/L, respectively. This case highlights the unique features of managing cyclical CS. Hypercortisolaemia must be confirmed on the day of IPSS as performing the procedure during a cyclical nadir risks a false-negative result. A block-and-replace regimen is required to prevent exposure to severe hypercortisolism or hypoadrenalism during cyclical nadirs. Early postoperative morning cortisol values can be misleadingly low if surgery coincides with a natural nadir; formal 6-week dynamic axis testing is essential.

P97 Rates of osmotic demyelination are not negligible in patients with severe hyponatraemia; a ten-year retrospective review.

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Osmotic demyelination (ODS) is rare but potentially catastrophic consequence of over-rapid correction of hyponatraemia. We performed a retrospective review of patients admitted to Tallaght Hospital between 2015-2025 with pNa <110mmol/L. 75 patients were included, 25 with pNa <105mmol/L. 47(63%) were female, and median(min,max) age 65 (36,94)y. 38 (51%) had alcohol excess and 24 (32%) had hypokalaemia. One definite case of ODS was identified; 61yoF with ataxia, characteristic findings on MRI; starting pNa was 105mmol/L, and increase at 24 and 48h - 11 and 17mmol/L. Three possible cases identified; (1) 46yoM, initial pNa 100mmol/L with 24h delta 23mmol/L, no symptoms, noted to have CT findings of ODS subsequently with pNa 107mmol/L three months later. (2) 58yoF, initial pNa 105mmol/K, 24h delta 6mmol/L, no clinical features of ODS, but possible changes on MRI. (3) 59yoM with established radiological evidence of ODS, pNa 98mmol/L. All had history of alcohol excess. In those without ODS, median rise in pNa at 24 and 48h was 7(-6,20) and 12(0,24)mmol/L. 13/72 (18%) had rise in pNa>10 in 24h, while 13/35 (37%) of those with alcohol excess had a rise in Na>8mmol/L. There were no cases of cerebral oedema. 10 patients died in hospital, median pNa was 124(108,145)mmol/L; no deaths attributed to hyponatremia. ODS is not uncommon in patients with severe hyponatraemia, and caution regarding correction thresholds is recommended.

P98 Case Report: A mimic of familial hypercholesterolaemia: lipoprotein X in type 3c diabetes and obstructive cholestasis

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Severe dyslipidaemia encountered during endocrine assessment is usually interpreted through an inherited or metabolic lens. This case demonstrates how obstructive cholestasis can produce an apparent LDL-C crisis that should redirect, rather than intensify lipid-lowering therapy. A 40-year-old man with chronic pancreatitis presented with a new diagnosis of pancreatogenic (type 3c) diabetes in hyperglycaemic hyperosmolar state. He was jaundiced, with pale stools and dark urine. Biochemistry and imaging confirmed obstructive cholestasis from common bile duct stricturing. HbA1c was 150mmol/mol,

indicating significant dysglycaemia. Lipid profile was striking: total cholesterol (TC) 39.6mmol/L (desirable concentration <5.2mmol/L) and direct LDL-C 42.3mmol/L (desirable concentration <2.6mmol/L), making inherited familial hypercholesterolaemia (FH) plausible by scoring criteria, but physiologically impossible because LDL-C exceeded TC. There were no clinical or familial features of FH and a previous lipid profile showed modest dyslipidaemia. ApoB was elevated at 2.78g/L (reference range 0.66-1.44g/L), indicating increased ApoB-containing particles, however, the cholesterol burden was disproportionate to ApoB, evidenced by an elevated TC:ApoB ratio 6.9mmol/g (reference range, 3.8-6.3mmol/g). Lipoprotein fractionation supported the presence of lipoprotein X (LpX), an ApoB-negative particle associated with cholestasis. After biliary stenting and metabolic stabilisation, bilirubin, TC and LDL-C fell; ApoB normalised by six weeks, suggesting transient insulin-deficiency-related dyslipidaemia coexisted with LpX. The key lesson is that severe apparent LDL-C elevation in pancreatogenic diabetes should not be interpreted in isolation from cholestasis, bilirubin trends and ApoB biology. Recognising LpX prevented misclassification as FH and focused management on biliary decompression and glycaemic recovery.

P99 Marked Hyperoestrogenism with Fluctuating Hypogonadism in a Young Male: A Diagnostic Challenge

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Gynaecomastia is common during puberty; however, persistent or progressive enlargement with biochemical abnormalities warrants further evaluation. An 18-year-old male presented with a 12-month history of progressive bilateral gynaecomastia. He denied systemic symptoms, medications, supplements, or recreational drugs. Puberty began at age 14. Paternal gynaecomastia was reported. Examination demonstrated a feminine body habitus with marked, non-tender bilateral gynaecomastia. Genital examination and BMI were normal. Initial biochemistry showed elevated oestradiol (308 pmol/L), suppressed FSH (<0.1 IU/L), LH 3.4 IU/L, and testosterone 9.2 nmol/L. Serial testing revealed marked hormonal variability, with testosterone ranging from 1.0–9.2 nmol/L and oestradiol peaking at 850 pmol/L. LH and SHBG remained within normal limits, while FSH fluctuated between <1.0 and 1.5 IU/L. Pituitary function was otherwise normal. Liver biochemistry showed mild hepatocellular injury; viral hepatitis screening was negative. Beta-hCG and AFP were normal. Testicular ultrasonography and adrenal MRI were unremarkable. Elevated oestradiol (216 pmol/L) was confirmed by liquid chromatography-mass spectrometry (LC–MS), excluding assay interference. Genetic testing, including aromatase excess syndrome (CYP19A1) and DSD panels, was negative. The patient denied exogenous oestrogen use and declined empirical aromatase inhibitor therapy. After 9-months of investigation, no cause was identified. Follow-up demonstrated spontaneous clinical and biochemical resolution, with testosterone 22.8 nmol/L and oestradiol 126 pmol/L. This case highlights the diagnostic challenge of hyperoestrogenism with fluctuating hypogonadism in young males. Structural and genetic causes were excluded; covert exogenous oestrogen exposure remained a consideration. Spontaneous resolution suggests a potentially under-recognised, self-limiting entity.

P100 Case report of hyponatremia evaluation leading to a diagnosis of a rare presentation of giant pituitary macroprolactinoma

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While prolactinomas are the most common pituitary tumour, giant macroprolactinomas are rare. We present a case of an 86 year old gentleman referred to the emergency department by his GP with incidental hyponatremia of 122mmol/L. Morning serum cortisol was 489nmol, Una <20mmol/L and UOsm 630mOsm/kg. The patient was on a thiazide, which was held. CT brain and TAP was performed as pNa was slow to correct. CT brain identified a large 4.9cm solid-cystic skull base mass. Subsequent MRI pituitary showed a large expansile destructive lesion centered on the clivus. The bony erosion extended posteriorly and eroded the occipital condyles, with anterior and lateral erosion of the petrous temporal bones, sphenoid wings and extension into to sphenoid sinuses. The pituitary sella was enlarged and CSF filled indicating possible previous apoplexy. Patient had normal visual fields assessment and was clinically hypogonadal. Pituitary panel showed total prolactin of >100,000 with bioactive of 77,740 IU/L, Testosterone 1.6nmol/L, FSH and LH 1.0u/L, IGF1 5.0nmol/L, free T4 16.1pmol/L and TSH 1.77mU/L. Treatment with low dose cabergoline 0.5mg weekly was commenced due to the potential risk of CSF leak which may be precipitated by rapid shrinkage of the tumour with higher doses, and short interval MRI is awaited. Repeated prolactin

after 2 months was 4833 IU/L. CT TAP and subsequent colonoscopy confirmed concurrent adenocarcinoma of the transverse colon and patient has been reviewed for possible surgical resection. Hyponatremia resolved after cessation of the thiazide diuretic.

P101 Diabetic Ketoacidosis Precipitated by Growth Hormone Secretagogue and SARM Polysubstance Abuse

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The recreational use of unregulated performance-enhancing drugs (PEDs) purchased online is rising rapidly. Growth hormone secretagogues, such as Ibutamoren, stimulate growth hormone release, which can markedly worsen insulin resistance by accelerating hepatic gluconeogenesis and reducing peripheral glucose uptake. We present a rare case of recurrent diabetic ketoacidosis (DKA) unmasked by multi-agent PED use in a young male with unrecognized metabolic susceptibility. A 30-year-old male with no formal history of diabetes presented to the emergency department with a 2-day history of persistent vomiting, tachypnea, and Kussmaul respirations. He reported a 4-month history of self-administering a non-prescribed PED regimen consisting of Ibutamoren, YK11, Ligandrol, Stenabolic, and tauroursodeoxycholic acid. Notably, he experienced an isolated episode of DKA seven years prior following anabolic steroid use, which resolved without requiring long-term therapy or metabolic follow-up. On admission, investigations confirmed severe metabolic derangement: blood glucose 29.0 mmol/L, blood ketones >7.0 mmol/L, venous pH 7.16, and bicarbonate 8.0 mmol/L. An infection screen, pancreatic imaging, and autoimmune diabetes markers (anti-GAD, anti-IA2, ZnT8) were entirely unremarkable. However, HbA1c was elevated at 109 mmol/mol, and a 1-month post-discharge evaluation revealed a profound insulin deficiency with a C-peptide level <0.03 µg/L. He was successfully transitioned to standard subcutaneous basal–bolus insulin. This case highlights the clinical potential of unregulated growth hormone secretagogues and selective androgen receptor modulators to precipitate life-threatening hyperglycemic emergencies. Clinicians must thoroughly investigate non-prescribed supplement histories during unexplained metabolic decompensations.

P102 From Polyuria to Precision Genetics , Diagnosing Hereditary AVP Deficiency

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Background:Hereditary AVP-D is a rare disorder most commonly caused by pathogenic variants in the AVP gene and is typically inherited in an autosomal dominant manner. Variants affecting the mature vasopressin moiety are particularly uncommon. Case Presentation:We present a case of 42-year-old man with a 10 to 12 year history of severe polyuria, polydipsia and nocturia requiring near continuous fluid intake. Family history was remarkable for diabetes insipidus affecting multiple generations, including his father, siblings, children and younger relatives, strongly suggesting autosomal dominant inheritance. Clinical examination revealed no neurological deficits, visual abnormalities or features of anterior pituitary dysfunction. Baseline pituitary hormone assessment was unremarkable. MRI of the hypothalamic-pituitary region demonstrated no structural abnormalities. Water deprivation testing confirmed AVP-D, demonstrating impaired urinary concentration during dehydration with a marked increase in urine osmolality following desmopressin administration. Given the striking family history, genetic testing was undertaken and identified a heterozygous pathogenic AVP variant, c.61T>C (p.Tyr21His), confirming hereditary AVP-D. Treatment with desmopressin resulted in significant symptomatic improvement. Discussion:A phenotype driven developmental and genetic diagnostic approach was undertaken. Early developmental disorders involving HESX1, SOX2, SOX3, GLI2 and FGF8 were considered unlikely due to the absence of midline, visual or panhypopituitarism features. Nephrogenic causes, including AVPR2 and AQP2 variants, were excluded by the excellent desmopressin response. The combination of isolated central diabetes insipidus, multigenerational inheritance and genetic confirmation established the diagnosis. This case highlights the importance of integrating clinical phenotype, developmental genetics and molecular testing in the evaluation of familial AVP-Deficiency.

P103 Case Series: Apalutamide-associated worsening of pre-existing hypothyroidism in two patients with prostate cancer

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Apalutamide is an androgen receptor inhibitor used in prostate cancer and is associated with thyroid dysfunction. We describe two cases of worsening pre-existing hypothyroidism identified during a single-centre retrospective review of apalutamide-treated patients at Beaumont Hospital. Clinical records and laboratory data were reviewed, and descriptive statistics were used. Thirteen patients were identified. Four of 13 patients (30.8%) had documented baseline thyroid function tests, and one of 13 patients (7.7%) had follow-up monitoring at the intended interval. No new hypothyroidism was identified. Two patients with known hypothyroidism required levothyroxine dose escalation after apalutamide initiation. Case 1, aged 79 years, was established on levothyroxine 75 micrograms daily. Baseline thyroid-stimulating hormone was 3.59 mIU/L and free thyroxine was 17.6 pmol/L. Seven months after apalutamide initiation, thyroid-stimulating hormone increased to 18.5 mIU/L with free thyroxine 15.7 pmol/L, requiring levothyroxine increase to 90 micrograms daily.Case 2, aged 68 years, was established on levothyroxine 100 micrograms daily. Baseline thyroid-stimulating hormone was 0.76 mIU/L and free thyroxine was 16.0 pmol/L. Three months after apalutamide initiation, thyroid-stimulating hormone increased to 65 mIU/L with free thyroxine 7.2 pmol/L, requiring levothyroxine increase to 200 micrograms daily. Follow-up biochemical outcomes after dose adjustment were unavailable. These cases suggest that apalutamide may substantially worsen pre-existing hypothyroidism and support baseline and structured follow-up thyroid monitoring, particularly in patients receiving thyroid hormone replacement.

P104 Case report: Salvage adrenalectomy post resection of primary ACTH-producing tumour

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In ectopic Cushing’s syndrome tumour resection is typically curative.This case required a salvage adrenalectomy. A 60-year-old man presented with severe electrolyte disturbance (sodium 152 mmol/L, potassium 1.9 nmol/L) on a background of newly diagnosed diabetes, requiring ICU admission for refractory hypokalaemia and a campylobacter bloodstream infection. CT abdomen and pelvis showed bilateral mild thickening of the adrenal glands. Clinical exam noted bilateral lower limb weakness in keeping with hypercortisolism-induced myopathy but no other cushingoid features. Cortisol level was 3793 nmol/L, ACTH 72 nmol/L (7 to 63 nmol/L), urinary cortisol 2055 nmol/24hrs (12-486 nmol/24hrs) TSH 0.16 mIU/L (0.27 to 4.20 mIU/L), T4 9.7 pmol/L (11.9 to 21.6 pmol/l), T3 2 pmol/L (3.1 to 6.8 pmol/), total prolactin 332 mIU/L (102 to 496 mIU/L). MRI pituitary was normal. CT thorax showed a pulmonary lesion which on PET CT had an appearance concerning for malignancy. A steroidogenesis inhibitor was started, followed by resection of the pulmonary lesion. Histology confirmed an ACTH producing neuroendocrine carcinoma. Cortisol and ACTH remained elevated post resection, requiring restarting of a steroidogenesis inhibitor. A repeat CT Thorax did not demonstrate any residual tissue. A salvage adrenalectomy was recommended but delayed in part due the patients worsening clinical instability from repeated infections, with the adrenalectomy being performed three months after the initial surgery. Histology confirmed bilateral adrenal cortical hyperplasia. This case highlights the challenges of manging refractory ectopic Cushing’s syndrome.

P105 Sensing Trouble: A Familial Case of CaSR-Related Hypocalcaemia

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Background: Autosomal dominant hypocalcaemia type 1(ADH1) is a rare inherited disorder caused by activating mutations of the calcium-sensing-receptor (CaSR), resulting in hypocalcaemia with inappropriately low/normal parathyroid hormone (PTH) levels. ADH1 is frequently misdiagnosed as idiopathic hypoparathyroidism despite important differences in pathophysiology, management and treatment-related complications. Case Presentation: A 35-year-old man presented with symptomatic hypocalcaemia manifesting as muscle spasms, malaise, perioral and peripheral paraesthesias. Initial biochemistry demonstrated corrected calcium of 1.9mmol/L, phosphate 1.65mmol/L and inappropriately low PTH<10pmol/L. There was no prior neck surgery or endocrinopathy. Family history revealed hypoparathyroidism affecting both his father and paternal uncle, each presenting in adulthood. His two teenage children and two brothers remain asymptomatic. Screening for autoimmune causes, including AIRE gene testing, was negative. Initial treatment with oral calcium and activated vitamin D resulted in biochemical improvement but persistent symptoms and fluctuating serum calcium. He was subsequently commenced on teriparatide(PTH 1–34) 10micrograms twice daily, achieving sustained symptomatic and biochemical stability over 18-years of follow-up. Extended genetic analysis identified a heterozygous CaSR mutation(c.452C>T; p.Thr151Met)

confirming ADH1. Discussion: ADH1 results from gain-of-function CaSR mutations causing suppression of PTH secretion and reduced renal calcium reabsorption, predisposing patients to hypercalciuria particularly during conventional therapy. Recombinant-PTH therapy may improve biochemical stability and symptom control compared with standard therapy. Emerging calcilytic therapies show promising early clinical results.Conclusion: Recognition of ADH1 is essential to avoid misdiagnosis. Genetic testing should be considered in patients with hypocalcaemia and suggestive family history.

P106 Case Report: Familial Partial Lipodystrophy Masquerading as Poorly Controlled Type 2 Diabetes- A Diagnostic Challenge

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Lipodystrophies are heterogeneous congenital or acquired disorders characterised by partial or generalised adipose tissue loss, predisposing patients to insulin resistance and cardiometabolic multimorbidity proportional to the extent of fat loss. Familial partial lipodystrophy (FPLD) is a rare subtype, estimated prevalence 1 in 1 million, characterised by selective fat loss with preserved or elevated BMI, resulting in a frequently delayed diagnosis; LMNA and PPARG variants account for more than half of reported cases. A 58-year-old woman with early-onset type 2 diabetes, polycystic ovary syndrome (PCOS), chronic kidney disease, metabolic dysfunction-associated steatotic liver disease, and severe hypertriglyceridaemia was referred for assessment of disproportionate metabolic dysfunction. Despite a BMI of 28 kg/m², she required approximately 4.4 units/kg/day of insulin. Physical examination revealed central and facial adiposity with marked peripheral lipoatrophy and prominent cutaneous veins, characteristic of partial lipodystrophy. Investigations demonstrated elevated fasting triglycerides (12.5 mmol/L) despite fenofibrate and a statin, and low sex hormone-binding globulin (SHBG) (13 nmol/L), consistent with severe insulin resistance. Monogenic genetic testing identified a heterozygous pathogenic missense variant in PPARG (NM_015869.5:c.452A>G, p.(Tyr151Cys)), confirming FPLD, PPARG subtype (MIM604367). Normal or elevated BMI and central fat accumulation frequently mask peripheral lipoatrophy, making partial lipodystrophy diagnostically challenging. Key clinical triggers include early-onset or disproportionately severe diabetes, hypertriglyceridaemia with low HDL-cholesterol, PCOS, and low SHBG, with thorough assessment of fat distribution essential to recognition. Timely diagnosis enables genetic evaluation and targeted management, reducing the risk of pancreatitis, cardiovascular disease, renal failure, and cirrhosis.

P107 Hormone deficiency is not a Diagnosis: Macroprolactinoma Presenting with Headache and Radiological Concern for Pituitary Apoplexy.

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Background: Hormone deficiencies often present with non-specific symptoms and should prompt evaluation for an underlying cause. In men receiving testosterone replacement, pituitary pathology may be obscured unless the full endocrine axis is assessed. Clinical Case: A 36-year-old male presented with a two-week history of change in headache on a background of testosterone deficiency managed for over ten years with intramuscular testosterone enanthate (most recently 150mg weekly, previously higher). He denied any visual changes. Examination noted muscular physique and gynecomastia. MRI brain revealed 13mm pituitary mass , CT brain with contrast raised concern for apoplexy. Investigations showed prolactin 4398 mIU/L (RR 53-360), suppressed gonadotrophins, high testosterone 39 nmol/L (RR 6-30) in keeping with exogenous use, and suppressed parathyroid levels with mild PTH-independent hypercalcaemia that resolved following withdrawal of testosterone. Macroprolactin was not present in significant amounts. Short Synacthen was normal. Interpretation of the gonadal axis was, however, complicated by long-term exogenous testosterone use. Cabergoline was commenced for probable macroprolactinoma with suspected apoplexy. Care was shared with neurosurgery and in view of clinical stability and conservative management with cabergoline and interval MRI surveillance was continued. He showed good response with prolactin levels falling to 922 mIU/L within eight weeks, and repeat imaging demonstrated a slight reduction in lesion size. Conclusion: In men with low testosterone, hormone deficiency should not be accepted as a diagnosis. Full pituitary-axis assessment and imaging must be considered. Secondly hypercalcaemia is a possible consequence of anabolic steroid excess but other causes must be excluded.

P108 Case Report: A Flare of Granulomatosis with Polyangiitis Manifesting as Arginine Vasopressin Deficiency

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Pituitary involvement in granulomatosis with polyangiitis (GPA) is rare, occurring in approximately 1% of patients, with arginine vasopressin deficiency (AVP-D) representing the most common endocrine manifestation. A 54-year-old woman presented with a four-month history of lethargy, arthralgia, polydipsia and nocturia. Background included a 16-year history of proteinase-3 and myeloperoxidase anti-neutrophil cytoplasmic antibody-positive GPA with pulmonary, sinonasal, cutaneous and musculoskeletal involvement on maintenance methotrexate. AVP-D was suspected with polydipsia and urine output exceeding 5L/day and biochemistry findings of urine osmolality 100mmol/kg, serum sodium 143-146mmol/L and serum osmolality 290mmol/kg. Pituitary MRI demonstrated a 12mm enhancing pituitary lesion, associated with loss of the normal left posterior pituitary bright spot on T1-weighted images. Anterior pituitary function was preserved. A random copeptin level was 2.6pmol/L (<21.4pmol/L) with paired serum sodium of 145mmol/L, supporting AVP-D. A diagnosis of GPA-related hypophysitis was made on the basis of clinical, biochemical and radiologic findings, in addition to systemic features of active flare. Treatment with desmopressin (DDAVP) 0.15mg/day was initiated, followed by reduction in urine output to 2L/day and resolution of polydipsia. Glucocorticoids and rituximab were subsequently commenced to treat GPA relapse. This case highlights AVP-D as a rare but important clinical manifestation of GPA-associated endocrinopathy and should be considered in patients presenting with polyuria and polydipsia during disease relapse. Early diagnosis and treatment may improve symptoms and radiological abnormalities, but AVP-D often persists despite immunosuppression, necessitating long-term endocrine follow-up.

P109 Case report: Resolution of Carpal Tunnel Syndrome Symptoms from Tirzepatide

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Glucagon-like peptide-1 receptor agonist (GLP-1RA) therapy has been associated with improved post-operative outcomes following carpal tunnel release(1). We report a case of a 36-year-old Caucasian woman with a 25-year history of type 1 diabetes who presented with a 12-month history of progressive numbness, tingling, and reduced grip strength affecting the palmar aspect of both hands. There was no history of prior hand injury or surgery. Nerve conduction studies demonstrated bilateral sensorimotor slowing of the median nerves across the carpal tunnel, consistent with bilateral carpal tunnel syndrome.Her body mass index was 32.7 kg/m², and tirzepatide was initiated at 2.5 mg weekly with monthly 2.5 mg dose escalation. She reported marked symptomatic improvement within one week, with complete resolution of symptoms by four months, accompanied by an 8 kg weight loss. Tirzepatide was temporarily discontinued due to an episode of viral gastroenteritis, following which her carpal tunnel symptoms recurred rapidly. Symptoms again resolved within two months of treatment reinitiation. This case suggests a potential therapeutic role for GLP-1RA therapy in carpal tunnel syndrome, possibly mediated through weight reduction and/or anti-inflammatory effects. Further studies are warranted to explore this association and its clinical implications.

P110 A Case Report of an Insulinoma in an Older Adult

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Insulinoma is a rare neuroendocrine tumour. Approximately 10% occur in association with Multiple Endocrine Neoplasia type 1 (MEN1) and 90% of them are benign. The median age at diagnosis is between 47 and 56 years old.An 89-year-old non-diabetic male with known hyperparathyroidism presented acutely with severe symptomatic hypoglycaemia with a capillary blood glucose of 1 mmol/L with paramedics. Biochemistry confirmed endogenous hyperinsulinemic hypoglycaemia after further spontaneous hypoglycaemia in hospital (serum glucose:2.6mmol/l, Insulin 607 pmol/L and C-peptide 5139 pmol/L). CT pancreas revealed a 1.7 cm enhancing lesion in the pancreatic tail suspicious for an insulinoma. This subsequently exhibited low grade radioisotope uptake on an octreotide scan. Despite intravenous dextrose, he experienced persistent hypoglycaemia in hospital necessitating diazoxide initiation. The case was further complicated by a new severe non-ischemic cardiomyopathy (left ventricular ejection fraction 25%) with resultant ventricular arrhythmia requiring permanent pacemaker implantation.

Further issues included a new radiological diagnosis of a likely renal cell carcinoma and diazoxide-induced thrombocytopenia necessitating a dose reduction. This gentleman was considered unsuitable for surgical resection because of advanced age and significant comorbidity and is being effectively managed now on diazoxide 25mg tds. Genetic testing for MEN1 and MEN4 were negative. This case highlights the complexity of managing in an insulinoma in an older adult and the value of multidisciplinary decision-making in managing complex endocrine disease.

P111 Case Report - Apathetic Thyrotoxicosis: An Unusual Presentation of Severe Grave's Disease with Impending Thyroid Storm in an Older Adult

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Apathetic thyrotoxicosis, a rare presentation of severe hyperthyroidism in older adults, is often associated with a delayed diagnosis due to the absence of classical adrenergic thyrotoxic symptoms. We report a 74-year-old woman referred from a local psychiatric hospital with free T4 116.3 pmol/L (ref, 9.8-23), free T3 >30.8 pmol/L (ref, 4.7-7.2), and TSH 0.01 mIU/L (ref, 0.33-4.8). The patient had previously presented to the local Emergency Department with low mood and suicidal ideation on a background of known mood disorder managed on long-term lithium. Initial assessment revealed mild sinus tachycardia, disorientation and reduced attention. There were no other features of thyrotoxicosis or Grave's disease. However, anti-TSH receptor antibodies were later found elevated 27.8 IU/L (ref, <1.8). Achieving biochemical control of hyperthyroidism proved extremely challenging. The patient demonstrated an initial biochemical response to propranolol and carbimazole but this was not sustained. The patient subsequently deteriorated, developing new-onset atrial fibrillation, persistent tachycardia, aspiration pneumonia, hyperactive delirium and haemodynamic instability. A Burch-Wartofsky Point Scale score of 35 suggested impending thyroid storm. Free T4 remained grossly elevated despite escalation to high-dose propylthiouracil and hydrocortisone and the addition of cholestyramine. Sustained clinical and biochemical improvement was only achieved after increasing the patients regular lithium dose from 400mg daily to 800mg daily. This case highlights the rare but well described phenomenon of apathetic thyrotoxicosis, and highlights the need for clinical vigilance in older adults presenting with isolated neuropsychiatric symptoms. Additionally, we outline treatment options in cases of refractory thyrotoxicosis.

P112 Case Report: Euglycaemic ketoacidosis associated with dual GLP-1/GIP receptor agonist treatment following bariatric surgery.

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Euglycemic ketoacidosis is characterised by high anion gap metabolic acidosis with elevated serum ketone bodies in the absence of significant hyperglycaemia. Although traditionally associated with sodium-glucose cotransporter-2 (SGLT-2) inhibitors, incretin-based therapies have recently been implicated. Tirzepatide is a dual-acting glucagon-like peptide 1 (GLP-1)/glucose-dependent insulinotropic polypeptide (GIP) receptor agonist. It is an approved treatment for obesity in patients without diabetes mellitus. We present the case of a 51-year-old woman without diabetes mellitus, two years post sleeve gastrectomy, who presented with nausea, vomiting and abdominal pain after commencing Tirzepatide. Laboratory evaluation revealed severe metabolic acidosis (pH 7.01, venous bicarbonate 9.2mmol/L), elevated serum ketones (6mmol/L) and normal blood glucose (5mmol/L), consistent with euglycemic ketoacidosis. Plasma lactate was normal (1.4mmol/L). She was managed with intravenous fluids, insulin infusion and anti-emetics until the symptoms and acidosis resolved. Tirzepatide was discontinued. This case underscores the potential for dual GLP-1/GIP receptor agonists to precipitate euglycemic ketoacidosis in patients without diabetes mellitus, particularly in the context of prior bariatric surgery. Clinicians should consider euglycemic ketoacidosis in patients receiving dual GLP-1/GIP therapy who present unwell with metabolic acidosis.

P113 When Diabetes Isn't Type 2: Recognising HNF1B Disease in Adults

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Hepatocyte nuclear factor-1β (HNF1β-MODY) is an autosomal dominant disorder associated with diabetes, renal and pancreatic structural and biochemical abnormalities. However, it can be difficult to diagnose due to wide phenotypic variability even within one family. We report a 41 year old man diagnosed with diabetes at age of 28 on routine check with BMI of 34.4kg/m2, HbA1c 73mmol/mol, and eGFR 79mL/min/1.73m2 at initial diagnosis. Metformin was initiated and sulphonylurea, GLP-1 agonist and SGLT2-inhibitors were added over time. Despite this, HbA1c averaged 61.9±10.0mmol/mol over 13 years with deteriorating eGFR falling to 46mL/min/1.73m2. Renal ultrasound showed simple renal cysts. His HbA1c was 74mmol/mol requiring insulin initiation at last follow-up. His daughter was diagnosed with diabetes and hypertension at age 19. HbA1c was 56mmol/mol and normal renal function at diagnosis. Workup for young-onset hypertension showed hypoplastic pancreas on adrenal CT and no renal cysts. She is currently on metformin/sitagliptin and empagliflozin with recent HbA1c of 51mmol/mol 5 years after diagnosis. There was no other family history of renal disease or diabetes. Given the combination of diabetes, renal cysts, and pancreatic hypoplasia within the family, HNF1β-MODY was suspected. Heterozygous HNF1B missense variant c.470G>A, p.(Gly157Asp) was diagnosed on genetic testing. Early molecular diagnosis of HNF1β-MODY allows for personalised treatment for these patients. Insulin should be initiated early to prevent diabetes complications as there is poor response to oral hypoglycaemic agents and facilitates cascade testing for family members.

P114 Case Report: Dual Pathology in Hypergonadotropic Hypogonadism – Klinefelter Syndrome & Pituitary Macroadenoma

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A 27-year-old man was referred to Urology with a 4-month history of intermittent testicular swelling and atrophic testes on ultrasound. He has a history of depression and anxiety, treated with sertraline and olanzapine. He had no testicular tenderness, swelling or masses. His BMI was 16.3 (54kg at 1.82m) and he had no history of STDs, UTIs or trauma, and was in a stable same-sex relationship. He was referred to Endocrinology following an MRI pituitary showing a 14mm hypovascular anterior pituitary mass. On review, he reported no headaches, visual field defects, gynaecomastia or galactorrhoea. Secondary male characteristics were intact, with normal libido and erectile function. Initial bloods by the GP showed oestradiol 126 pmol/L (0-116), testosterone 11.5 nmol/L (6.07-27.1), prolactin 600 mU/L (56-279). Further anterior pituitary testing showed, LH 10.9 IU/L (1.2-8.6), FSH 26.5 IU/L (1.3-19.3), prolactin 688 mU/L, testosterone 13.06 nmol/L, and normal GH, IGF-1, TSH and cortisol levels. Three months later he was reviewed in the endocrinology clinic with new symptoms of erectile dysfunction. Repeat bloods showed increasing FSH (33.4) and LH (17.9), with decreasing testosterone (9.42) and prolactin (315). Subsequent genetic testing confirmed Klinefelter syndrome, and he was treated with topical testosterone, with good effect. His repeat MRI at 6 months was unchanged. His prolactin elevation was consistent with stalk effect and concomitant antipsychotic use. This case emphasises the importance of a comprehensive workup and the complexity involved when two independent potential causes of hypogonadism coexist.

P115 Dementia - a hidden risk factor for thyroid storm

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Background: Thyroid Storm is a rare endocrine emergency with high mortality, particularly in older adults in whom presentation may be atypical and diagnosis delayed by frailty, cognitive impairment and coexisting cardiovascular disease. Case Presentation: We report the case of a 60-year-old woman with established dementia and Graves‘ disease. She presented to ED with acute onset breathlessness and severe respiratory distress. Three days before admission, thyroid function tests (TFTs) arranged in primary care had demonstrated profound biochemical thyrotoxicosis, with free thyroxine (T4) greater than 100 pmol/L and a fully suppressed thyroid-stimulating hormone (TSH) of <0.01 mIU/L. Medication adherence had been poor because of progressive cognitive decline. On presentation, she had features of acute cardiopulmonary decompensation (HR 132/m, BP 122/88mmHg, RR 20/m Sats 97% on RA, Temp 36.6). Examination and CXR were consistent with Acute Pulmonary Oedema. In the context of above, diagnosis of thyroid storm was made. Her BWPS score was 45 and TS2 as per JTA criteria. She was commenced immediately on beta-blockade, anti-thyroid therapy and corticosteroids. Despite rapid recognition and urgent treatment, her condition deteriorated with progressive cardiorespiratory failure. She passed away within

hours of hospital admission. Conclusion: This case highlights the fulminant course of Thyroid Storm in older patients with background cognitive impairment. Severe biochemical thyrotoxicosis may precede catastrophic deterioration by only a short interval. Early identification of vulnerable patients, careful follow-up of markedly abnormal thyroid function tests and rapid escalation of care are essential, although mortality remains substantial despite prompt intervention.

P116 When Hypercalcaemia Breaks the Heart: Severe Dilated Cardiomyopathy in Primary Hyperparathyroidism

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Background:Cardiovascular manifestations of primary hyperparathyroidism (PHPT) are increasingly recognised, but severe dilated cardiomyopathy (DCM) is rare. Case: We describe a 44-year-old woman with no previous cardiac history presented with progressive dyspnoea for two weeks. Echocardiography demonstrated severe left ventricular (LV) systolic dysfunction, with ejection fraction (EF) 20–25%, and NT-pBNP was 7000 pg/mL. Cardiac MRI confirmed a severely dilated LV with EF 33–35% and concentric hypertrophy, without myocardial infiltration, infarction or scarring. Laboratory evaluation identified hypercalcaemia likely due to PHPT (peak corrected serum calcium 2.9mmol/L, elevated parathyroid hormone 145.8pg/mL, calcium creatinine clearance ratio 0.021). Neck ultrasound demonstrated right inferior parathyroid adenoma. CT Thoracic imaging revealed hilar and mediastinal lymphadenopathy. However, FDG-PET demonstrated no active cardiac or systemic sarcoidosis. Mild urinary noradrenaline and plasma normetanephrine elevation prompted evaluation for catecholamine excess and multiple endocrine neoplasia (MEN). Repeat resting plasma metanephrines normalised, in keeping with guideline-recommended repeat assessment. Genetic tests for MEN & FHH-associated mutations and inherited DCM did not identify pathogenic variants. She was managed by cardiology team for DCM and treated with intravenous zoledronic acid and cinacalcet for hypercalcaemia. Resolution of hypercalcaemia and heart failure management led to symptomatic improvement and recovery of LV function to 40%. She was referred for parathyroidectomy as definitive management for PHPT. Conclusion: PHPT may present with severe, potentially reversible non-ischaemic DCM. This case highlights the importance of considering endocrine causes such as hypercalcaemia in unexplained heart failure and demonstrates the multidisciplinary evaluation required to exclude infiltrative, inherited and syndromic disease.

P117 Case Report: Central Diabetes Insipidus and Panhypopituitarism Secondary to Pituitary Metastasis from Metastatic Oesophageal Adenocarcinoma.

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Pituitary metastases are an uncommon cause of central diabetes insipidus (DI) and hypopituitarism. We report a case of metastatic oesophageal adenocarcinoma presenting with combined posterior and anterior pituitary dysfunction. A 63-year-old man with metastatic oesophageal adenocarcinoma was admitted with sepsis secondary to a respiratory tract infection. During admission, he remained persistently hypotensive with polyuria and polydipsia. He developed progressive hypernatraemia (up to 162 mmol/L) despite intravenous fluid replacement. Biochemical evaluation demonstrated hyperosmolar serum (320 mOsm/kg) with inappropriately dilute urine (urine osmolality 112 mOsm/kg), consistent with DI. Anterior pituitary assessment confirmed panhypopituitarism, including secondary adrenal insufficiency and central hypothyroidism. Formal water deprivation testing was contraindicated because of acute illness and severe hypernatraemia. Hypotension resolved following treatment with hydrocortisone. Urine osmolality tripled following intranasal desmopressin, indicating central DI. MRI demonstrated pituitary enlargement with loss of the posterior pituitary bright spot, consistent with pituitary metastasis. He was commenced on regular desmopressin and hydrocortisone, with normalisation of serum sodium (162–139 mmol/L) and marked clinical improvement. The patient was discharged on hormone replacement therapy before planned palliative cranial radiotherapy. Pituitary metastases should be considered in patients with malignancy presenting with persistent hypotension, polyuria, polydipsia, and/or hypernatraemia. This case illustrates that, when formal water deprivation testing is contraindicated, diagnosis of central DI can be established using biochemical findings, trial of desmopressin and pituitary imaging. It also emphasises that pituitary metastases may involve both the posterior and anterior pituitary, requiring prompt recognition and comprehensive hormone replacement.

P118 Case Report - Recurrent Hypercalcemia: An Atypical Case of Bone Marrow Sarcoidosis

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Sarcoidosis is a multisystem granulomatous disorder that commonly involves the lungs but may rarely present with isolated extrapulmonary disease. Hypercalcaemia occurs in approximately 10% of cases due to extrarenal production of 1,25-dihydroxyvitamin D by activated macrophages. Bone marrow involvement is uncommon and isolated bone marrow sarcoidosis is exceptionally rare. A 69-year-old man presented with recurrent severe hypercalcaemia (corrected calcium 3.17 mmol/L), acute-on-chronic kidney injury, and suppressed parathyroid hormone levels. He reported lethargy, thirst, polyuria, postural dizziness, and lower-limb paraesthesia. Initial investigations demonstrated PTH-independent hypercalcaemia with elevated angiotensin-converting enzyme (ACE). Extensive evaluation excluded malignancy, plasma cell dyscrasia, and infectious causes. Cross-sectional imaging did not reveal a clear cause for this presentation. Bone marrow biopsy revealed non-caseating granulomatous inflammation consistent with sarcoidosis. The patient was treated acutely with intravenous fluids followed by oral glucocorticoid therapy after exclusion of infection and malignancy. Serum calcium normalised with partial recovery of renal function. Hypercalcaemia recurred one year later but responded to low-dose prednisolone. Subsequently, the patient has remained clinically stable. This case highlights isolated bone marrow sarcoidosis as a rare cause of recurrent PTH-independent hypercalcaemia and renal impairment. It emphasises the importance of considering granulomatous disease in the differential diagnosis of unexplained hypercalcaemia, even in the absence of significant pulmonary involvement or persistently elevated ACE levels. Bone marrow biopsy can be a valuable diagnostic tool when standard investigations fail to identify the underlying cause.

P119 A Case Report of Multiple Endocrinopathies in a patient with Familial Mediterranean Fever: Thyroiditis and Adrenal Insufficiency

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Familial Mediterranean Fever(FMF) is an autosomal recessive autoinflammatory disorder characterised by episodic fevers and serositis. Untreated disease may lead to secondary amyloidosis. Endocrine manifestations of FMF are uncommon, with evidence limited to case reports and series. Thyroid involvement occurs through autoimmune thyroiditis or amyloidosis. Primary adrenal insufficiency secondary to amyloidosis, autoimmune Addison's disease and tertiary adrenal insufficiency have been described in association with FMF. We present the case of a fifty-two-year-old male with FMF complicated by multisystem amyloidosis and co-existing thyroid and adrenal disorders. His medical history included end-stage kidney disease requiring renal transplantation and tertiary adrenal insufficiency. He initially presented with recurrent fevers, abdominal pain, and elevated inflammatory markers without evidence of infection. He developed thyrotoxicosis lasting four months, followed by a period of transient hypothyroidism. Thyroid ultrasound demonstrated features of thyroiditis without goitre. Thyroid antibodies were negative. Genetic testing identified a heterozygous pathogenic variant in the MEFV gene, supporting a diagnosis of FMF. Further investigations demonstrated multi-system amyloidosis. During later admissions with hyperkalaemia, endocrine evaluation revealed elevated adrenocorticotropic hormone(93pg/mL,reference range 7.2-63.3pg/mL), low cortisol(112nmol/L,reference range 166 - 507nmol/L), high renin(252.8mIU/L,reference range 4.2-99mIU/L), and low aldosterone(<102pmol/L, reference range 102-1197pmol/L) concentrations, raising suspicion of concurrent primary adrenal insufficiency in addition to established tertiary adrenal insufficiency. Fludrocortisone was commenced, resolving his hyperkalaemia.This case highlights the diverse endocrine manifestations of FMF. Early recognition of these rare complications is important to facilitate timely diagnosis and appropriate management.

P120 Case Report: Non-Invasive Prenatal Diagnosis of Fetal GCK-MODY Using Cell-Free DNA

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41-year-old woman with a history of GCK-MODY diagnosed following her first pregnancy and obsessive-compulsive disorder (OCD) presented at 9 weeks' gestation. Throughout the pregnancy, she experienced significant anxiety regarding hyperglycaemia and potential adverse fetal outcomes resulting in a highly restrictive low-carbohydrate diet in an attempt to maintain tight glycaemic control, with frequent ketosis, and considerable distress related to persistently elevated glucose levels,

significantly affecting her quality of life. Current practice in GCK-MODY pregnancies is to monitor fetal growth with serial ultrasound assessments from 26 weeks' gestation and to initiate insulin therapy only when accelerated fetal growth is identified. Despite this, the patient was keen to commence insulin because of severe anxiety regarding the potential impact of hyperglycaemia on the fetus. Insulin detemir was initiated but discontinued following an allergic reaction. To guide treatment, and to help alleviate the psychological burden associated with unknown fetal mutation status, non-invasive prenatal testing (NIPT) using cell-free fetal DNA was performed through Exeter, ultimately confirming negative fetal GCK mutation status at 28 weeks. Multiple daily injection insulin therapy with Humulin I and Fiasp was commenced at 31 weeks. Serial growth scans had shown estimated fetal weight in the mid-20th percentiles until 28 weeks' gestation but subsequently accelerating rapidly to the 95th percentiles at 31 weeks. Following insulin treatment (57 units/day), estimated fetal weight fell to the 58th percentile at delivery. No adverse maternal or neonatal outcomes occurred. This case highlights the clinical utility of NIPT for GCK-MODY and its potential to guide personalized management.

P121 Case Report: HNF1B-MODY in a Patient with Prior Pancreatectomy for Neuroendocrine Tumour: A Novel Association

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Maturity-onset diabetes of the young type 5 (HNF1B-MODY) is a rare monogenic disorder caused by HNF1B variants or whole-gene deletions. It affects multiple organ systems, with renal disease, hepatic dysfunction, and neurodevelopmental features alongside diabetes, and is often missed or misclassified as type 1 or type 2 diabetes. We describe a case in which prior pancreatic surgery further obscured the diagnosis.A 43-year-old man with mild cognitive impairment, autistic features, and deranged liver chemistries underwent distal pancreatectomy in 2012 for a pancreatic neuroendocrine tumour (NET) (Ki67 <2%). Insulin-requiring diabetes was diagnosed in 2016, at age 32. Given his phenotype and history, the aetiology was of autoimmune type 1 diabetes mellitus (T1DM) despite negative auto-autoantibodies, or pancreatogenic diabetes. Diagnostic doubt persisted, and ten years after diagnosis, in 2025, his C-peptide remained preserved at 516 pmol/L, and this was despite long-standing low dose insulin dependence thirteen years after pancreatectomy, prompting reconsideration of his diabetes classification. Subsequent genetic testing identified a heterozygous whole-gene HNF1B deletion, likely de novo given the absence of a suggestive family history, confirming HNF1B-MODY. This case is the first reported of HNF1B-MODY in a patient with pancreatic NET. A feature of HNF1B is pancreatic hypoplasia, which might predispose to pancreatic NET. However, this is very rare and any association is not clear. Antibody-negative insulin-requiring diabetes with preserved C-peptide, particularly alongside cognitive impairment, autistic features, liver or renal dysfunction, warrants consideration of HNF1B-MODY, even when another cause for pancreatic insufficiency is already apparent and family history seems unremarkable.

P122 Case report - Post-bariatric hypoglycaemia in pregnancy after Roux-en-Y gastric bypass surgery

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In 2022, an estimated 1 in 8 people lived with obesity worldwide. Bariatric surgery (BS) confers major metabolic benefits-including weight loss, diabetes remission, and reduced micro- and macrovascular events- and its use is increasing. Roux-en-Y gastric bypass (RYGB) is the most common of these procedures. It is performed predominantly in women of childbearing age, and is associated with post-bariatric hypoglycaemia (PBH). A 2019 meta-analysis reported PBH in 58% of pregnant women after RYGB. Current PBH guidelines recommend dietary strategies (carbohydrate restriction, low–glycaemic index foods, avoidance of high–GI foods) and pharmacotherapy (acarbose first-line, somatostatin analogues second-line, diazoxide third-line), but these agents are not licensed in pregnancy. We report the case of a pregnant woman in her late thirties, with prior RYGB. She developed gestational diabetes mellitus (GDM) and commenced insulin at 27 weeks' gestation. At 31 weeks, she presented with symptomatic hypoglycaemia and was diagnosed with PBH. Management included cessation of insulin, dietary modification, and acarbose, but persistent hypoglycaemia required octreotide and total parenteral nutrition. An elective Caesarean section was performed at 32 weeks. Maternal hypoglycaemia resolved post-delivery. The male infant required

neonatal intensive care admission but subsequently thrived. This case underscores the diagnostic and therapeutic complexity of PBH in pregnancy after RYGB, the tension between guideline-recommended agents and pregnancy licensing, and the need for multidisciplinary care and individualised risk–benefit decisions. Prospective studies and pregnancy-specific guidance are needed to optimise the management of PBH in pregnancy.

P123 Anabolic Steroid-Induced Dilated Cardiomyopathy Presenting with New-Onset Atrial Fibrillation and Polycythaemia

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Anabolic androgenic steroids misuse is common in sports. We present a case of 56-year-old male presenting with atrial fibrillation, dilated cardiomyopathy and heart failure following anabolic steroid use for bodybuilding. This case highlights cardiovascular effects of anabolic steroid exposure. Case Presentation:A male with background of hypertension was referred to the Emergency Department with atrial fibrillation. He attended the gym daily, initially denied anabolic steroid use but subsequently admitted 2 years use of oral testosterone. Laboratory investigations demonstrated raised haemoglobin at 19.2 g/dL (13-17g/dl), renal impairment (creatinine 132 umol/l, eGFR 40 ml/min/1.73 m²), CK 445u/l(0-190u/l), initial troponin 22ng/l, subsequently 19ng/l(<14ng/l) and BNP 1419pg/ml. Further investigations revealed markedly raised testosterone level 78 nmol/L, (7-37nmol/L), suppressed FSH <0.55 mIU/ml (1.4-18.1mIU/ml) LH <1.44 mIU/ml (1.5-9.3 mIU/ml),raised estradiol levels 807 pg/ml (69-146pg/ml),confirming anabolic steroid use. Echocardiography showed left ventricular systolic dysfunction with ejection fraction of 35%, left ventricular dilatation, left atrial enlargement, left ventricular hypertrophy, and mitral regurgitation. Management included immediate cessation of anabolic steroids and commencement of heart failure therapy. Discussion: Several features support the diagnosis of testosterone-induced cardiomyopathy, including prolonged anabolic steroid exposure, development of non-ischaemic dilated cardiomyopathy, associated polycythaemia, elevated testosterone levels and suppressed LH and FSH. Anabolic steroids can cause severe cardiomyopathy. Mechanism underlying anabolic steroid induced cardiomyopathy are multifactorial. The extent to which recovery of cardiac and hypothalamic-pituitary-gonadal axis function will occur remains to be determined.

P124 Mind the Gap: Hypocalcaemia Revealing 22q11.2 Deletion Syndrome

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Background: 22q11.2 deletion syndrome(DiGeorge syndrome) is a multisystem genetic disorder typically diagnosed in childhood due to congenital cardiac disease, immunodeficiency, developmental delay or hypocalcaemia secondary to hypoparathyroidism. However, milder phenotypes are increasingly recognised in adulthood, often following investigation of unexplained endocrine abnormalities. Case Presentation:A 51-year-old man was referred with longstanding unexplained hypocalcaemia. In 2021, he experienced a seizure secondary to hypocalcaemia(corrected calcium 1.73mmol/L). At endocrine review, corrected calcium remained low at 1.91mmol/L despite calcium and vitamin D supplementation. Parathyroid hormone was inappropriately low-normal(14ng/L), with magnesium 0.83mmol/L and phosphate 1.40mmol/L, consistent with hypoparathyroidism. Thyroid function and HbA1c were normal. There was no neck surgery history, autoimmune endocrinopathy or relevant family history. Further assessment identified nasal speech, low-set ears, nasal bridge abnormalities, unilateral renal agenesis on previous imaging and mixed conductive/sensorineural hearing loss. Cardiac examination and ECG were normal, with echocardiogram pending. There was no history of recurrent infections. Genetic testing identified a 2-Mb deletion at chromosome 22q11.2, confirming 22q11.2 deletion syndrome. Serum calcium has remained within target range on activated vitamin D supplementation. Discussion: This case illustrates the marked phenotypic variability of 22q11.2 deletion syndrome and the potential for diagnosis in late adulthood when classic childhood features are absent. Hypocalcaemia due to hypoparathyroidism may be the presenting manifestation. Recognition of associated dysmorphic, renal, and auditory abnormalities should prompt genetic evaluation. Conclusion:22q11.2 deletion syndrome should be considered in adults presenting with unexplained hypocalcaemia and multisystem features.

P125 Case report – short stature driven by seronegative autoimmune chronic thyroiditis

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Seronegative autoimmune chronic thyroiditis is a rare but recognised condition. A 17-year-old woman was referred to the endocrinology clinic by her general practitioner due to short stature. Clinical exam showed a height of 142 cm (predicted mid-parental height 166cm), a weight of 46.25kg, Tanner stage 2 puberty. No goitre was palpable. The patient reported menarche at age 12 and good academic performance but cold intolerance and mild chronic fatigue. Imaging revealed delayed tooth eruption and an estimated bone age of less than 13 years. Laboratory investigations showed a high TSH (638 mIU/L, NR 0.27 to 4.20 mIU/L), suppressed T4 (<1.3 pmol/L, NR 11.9 to 21.6 pmol/L) and T3 (<2.0, NR 3.1 to 6.8 pmol/L), elevated total prolactin (1912 mIU/L, NR 102 to 496 mIU/L), low IGF-1 (109 ug/L, NR 156 to 479 ug/L), anti-thyroid peroxidase negative, cortisol normal range, anti-tTG antibodies positive. A thyroid US showed an atrophic gland characteristic of chronic autoimmune thyroiditis. Levothyroxine was started. At the six month follow up the patient demonstrated good response to treatment with a 1cm gain in height, improvement in energy levels, a weight loss of 5kg, and a repeat dental x-ray showing progression of adult teeth. A repeat laboratory panel showed normalisation of TSH, TFTs and IGF-1. Total prolactin remained elevated. The patient is a awaiting an OGD given the positive anti-tTG antibodies. This case shows that traditional serological markers are only part of the clinical picture in autoimmune thyroiditis.

P126 Case report - Malignant Struma Ovarii with follicular variant of papillary thyroid cancer

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Struma Ovarii (SO) is a rare monodermal ovarian teratoma characterised by thyroid tissue comprising more than 50% of the tumour, with malignant transformation occurring in fewer than 5% of cases. Papillary thyroid carcinoma (PTC) is the most common histological subtype. Owing to its rarity, optimal postoperative management remains controversial, particularly in patients with disease confined to the ovary. A 58-year-old postmenopausal woman presented with heavy vaginal bleeding. Imaging demonstrated a fibroid uterus with bilateral complex adnexal masses. Serum CA 19-9 was mildly elevated (52u/mL), while other tumour markers were within normal limits. Following multidisciplinary team (MDT) discussion, the patient underwent total abdominal hysterectomy, bilateral salpingo-oophorectomy, omentectomy, and appendicectomy. Histopathological examination revealed a Struma Ovarii of the right ovary containing a 10mm follicular variant of papillary thyroid carcinoma which was confined within the ovarian capsule (FIGO Stage IA). Immunohistochemistry was positive for thyroglobulin, TTF-1, and PAX8, confirming thyroid differentiation, while synaptophysin and chromogranin were negative. The left ovary contained a mature cystic teratoma with abundant benign thyroid tissue and a small serous cyst adenofibroma, both confined to the ovary. The patient was referred to endocrinology for ongoing management and specialist MDT involvement. This case highlights the diagnostic complexity and requirement for MDT management of rare tumours. In this case individualized postoperative management should balance recurrence risk against the potential morbidity of further treatment including total thyroidectomy and radioactive iodine therapy. Further evidence, however, is required to establish standardized treatment recommendations for this rare malignancy.

P127 Case report: Cyclic Cushing's Syndrome - A diagnostic challenge

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Cyclic Cushing syndrome (CCS) is a rare form of endogenous hypercortisolism characterized by, intermittent phases of excess cortisol, alternating with periods biochemical remission, frequently resulting in delayed diagnosis due to discordant clinical and laboratory findings. We report a 48-year-old Sudanese woman with poorly controlled type II diabetes who presented with long-standing headaches and progressive weight gain. Clinical examination revealed cushingoid features with a BMI of 32.6 kg/m², tachycardia, and features of metabolic dysfunction. Initial biochemical evaluation demonstrated a normal cortisol level (490nmol/L) and a normal ACTH. Urinary steroid profile showed increased cortisol metabolites suggesting a cushingoid pattern, while 24-hour urinary free cortisol was mildly elevated (223 nmol/24h). Dexamethasone suppression testing showed inadequate suppression (78 nmol/L) and further evaluation demonstrated loss of diurnal cortisol rhythm with intermittently discordant results. No pituitary lesion was identified on MRI. Over subsequent follow-ups, biochemical investigation returned

to normal including 24-hour urinary free cortisol, dexamethasone suppression, and urinary steroid profiles. However, following an interval of normal biochemical findings, a repeat testing again demonstrated marked biochemical recurrence with urinary free cortisol exceeding 1200 nmol/24h and elevated random cortisol (606 nmol/L), consistent with cyclic hypercortisolism. This case highlights the diagnostic challenge of cyclic Cushing's syndrome, where fluctuating biochemical activity may lead to false-negative investigations. Serial hormonal assessment during symptomatic phases is essential to establish the diagnosis and guide further localization workup.

P128 Reversible hypothalamic-pituitary-adrenal axis dysfunction associated with chronic alcohol excess presenting with recurrent severe hyponatremia: A Case Report

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Chronic alcohol excess is associated with HPA(hypothalamic-pituitary-adrenal) axis dysfunction. The hypothesis is that cortisol secretion is elevated during intoxication and acute withdrawal however the HPA axis becomes less responsive to supra-physiological stressors in chronic alcohol use. We present a case of partial HPA axis dysfunction in a 53-year-old man with chronic alcohol use (140units/week), with recurrent hospital admissions and severe hyponatremia. He presented in 2019 with symptomatic hypoglycemia (glucose 3mmol/L) and hyponatremia (Na 121mmol/L, urinary Na-37mmol/L, urine Osmolality 362mOsm/kg). Short Synacthen test showed cortisol rise from 393nmol/L to 473nmol/L(30-minutes) and was prescribed long term steroids on discharge. In 2021 follow up, cortisol rose from 311nmol/L to 469nmol/L(at 30-minutes) and 561nmol/L(60-minutes) allowing glucocorticoid discontinuation. Two years later, following alcohol relapse, he developed severe hyponatremia (117 mmol/L) and was restarted on steroids without SST. He was subsequently admitted after a fall with profound hyponatremia and coma in 2026 (serum Na-98 mmol/L, urinary Osmolality-228 mOsm/kg, urine Na-20mmol/L) and had been administered intravenous steroids from arrival. Towards recovery, SST showed baseline cortisol of 268nmol/L and a 30 minutes cortisol of 446nmol/L. In our laboratory a normal SST response requires a 30 min cortisol level cut-off of >500nmol/L. While hyponatremia is likely multifactorial in this case, there is some evidence of impaired HPA axis response in context of chronic alcohol use which would suggest potential need for sick day steroid cover in this scenario.

P129 Case Report of Diabetic Striatopathy: A Sweet Move

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Diabetic Striatopathy, non ketotic hyperglycaemic hemichorea hemiballismus, is a rare neurological complication of severe hyperglycaemia, with an estimated prevalence of 1 per 100,000 individuals. It may develop in patients with prolonged, poorly controlled diabetes or can be the first presentation.The condition typically manifests with involuntary unilateral choreiform or ballistic movements.Investigations demonstrate marked hyperglycaemia, while neuroimaging reveals characteristic signal abnormalities within the basal ganglia.The case report describes a 53 years old woman with a one year history of poorly controlled diabetes presented with a gradual onset of ataxic gait and involuntary right sided jerky movements. Neurological examination revealed normal higher functions, mild right sided pyramidal weakness and right hemi-chorea. Biochemical investigations revealed HHS(Hyperosmolar Hyperglycaemic State) levels of serum glucose (32mmol/l) and serum osmolality (295mOsm/kg) followed by HbA1c of 173mmol/mol. The Brain Imaging CT showed hyper dense changes in left striatum, mimicking left striatal infarction, later T1-weighted MRI brain showed hyper intensity in the basal ganglia contralateral to the choreiform movements which alongside clinical picture pointed towards the diagnosis of hyperglycaemic chorea.Patient was started on aggressive fluid and electrolyte replacement therapy along with insulin. Neurology input was sought and tetrabenazine was commenced.The symptoms began to improve as blood glucose levels decreased to 12-14mmol/l and completely resolved once euglycaemia was achieved to 8-10mmol/L.This case highlights the importance of recognising hyperglycaemia as a cause of acute hyperkinetic movement disorder. Early identification and rigorous glycaemic control is central to clinical recovery.

P130 Case Series: Three Cardiovascular Faces of Phaeochromocytoma.

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Phaeochromocytomas are rare catecholamine-secreting tumours with variable cardiovascular manifestations. We describe three patients in whom phaeochromocytoma presented through distinct cardiovascular phenotypes. A 73-year-old female presented with palpitations and chest pain. Troponin peaked at 122ng/L and coronary angiography showed mild disease, consistent with a myocardial infarction with non-obstructive coronary arteries-like presentation. Blood pressure was labile. Cardiac MRI was unremarkable. She had elevated plasma normetanephrine and metanephrine. A 4cm left adrenal lesion was identified. She was treated with sequential alpha and beta blockade. Adrenalectomy was deferred after a lacunar infarct. A 20-year-old man was investigated for secondary hypertension after presenting with palpitations and chest tightness. He had severe hypertension, with ECG evidence of left ventricular hypertrophy. Biochemistry showed elevated plasma normetanephrine. CT adrenals demonstrated a 3.3cm right adrenal mass. His admission was complicated by labile hypertension and elevated creatine kinase elevation, peaking over 11,000 U/L. He was treated with sequential alpha and beta blockade and is awaiting adrenalectomy. A 79-year-old man with an 8.9cm left adrenal mass and elevated plasma metanephrine, was found to have severe symptomatic aortic stenosis. Echocardiography showed a mean gradient of 42mmHg, aortic valve area 0.8cm² and left ventricular ejection fraction 45%, with non-obstructive coronaries on angiography. He underwent transcatheter aortic valve implantation, complicated by complete heart block requiring permanent pacemaker implantation. He is awaiting adrenalectomy. This series demonstrates the broad range of cardiovascular features that can be present in phaeochromocytomas, often as the presenting complaint, and how this can impact on timing of surgery.

P131 Case Report - Acidosis, Air and Ischemia: Diabetic Ketoacidosis-Induced Pneumopericardium with Myocardial Injury

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This case describes a complex presentation of severe diabetic ketoacidosis (DKA) secondary to presumed insulin pump infusion set failure. A 21-year-old man with pre-existing type 1 diabetes mellitus (T1DM) presented with a 24-hour history of refractory vomiting. He had marked hyperglycaemia, elevated ketones and a pH of <7. He was diagnosed with severe DKA and treated according to standard protocol. Examination demonstrated extensive subcutaneous emphysema involving the upper chest and neck. Chest radiography identified pneumomediastinum, which was confirmed on computed tomography (CT), together with pneumopericardium. Boerhaave's syndrome was initially suspected. However, CT and upper gastrointestinal endoscopy demonstrated no evidence of oesophageal perforation. A diagnosis of Hamman's syndrome, or spontaneous pneumomediastinum (SPM), was therefore made, a condition generally considered self-limiting and benign. Two days after admission, the patient developed a one-hour episode of chest pain associated with transient, atypical anterior ST-segment elevation on electrocardiography (ECG). Both the chest pain and ECG changes resolved spontaneously. Troponin-I subsequently rose significantly, peaking at 9,184 ng/L (reference <45 ng/L). The dynamic ECG changes were atypical for classical ST-elevation myocardial infarction, and the differential diagnosis included coronary vasospasm, spontaneous coronary artery dissection, myopericarditis and type 2 myocardial infarction. CT coronary angiography demonstrated normal coronary arteries without evidence of dissection, while transthoracic echocardiography showed normal biventricular size and systolic function with no haemodynamically significant valvular disease. The patient recovered without significant residual complications and was discharged home with planned outpatient follow-up and further cardiac investigation.

P132 Case Report - The Fragile Foot: A Rare Case of Charcot Neuroarthropathy in Pregnancy

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Charcot neuroarthropathy, a rare limb-threatening complication of diabetic peripheral neuropathy, may be missed in pregnancy due to oedema and overlapping diagnostic features. This is a case report of a 43-year-old nulliparous woman living with type 1 diabetes mellitus for 32 years, conceived via IVF. Diabetes-associated complications included peripheral neuropathy, retinopathy, nephropathy, and osteomyelitis requiring digital amputation. Pre-pregnancy DAFNE education and initiation of Medtronic 780G insulin pump decreased HbA1c from 125 to 70 (mmol/mol). Pregnancy was complicated by diabetic foot ulceration, recurrent severe hypoglycaemia, and worsening nephropathy with hyperkalaemia. At 24 weeks' gestation she

presented to the obstetric emergency department with right foot pain, swelling, erythema and sensation of "walking on Lego". Differential diagnoses included deep vein thrombosis and cellulitis; venous ultrasonography was negative. X-rays identified right calcaneal fracture. Given severe neuropathy and minimal preceding trauma, Charcot neuroarthropathy was suspected. The foot was immobilised in a plaster cast and monitored weekly, with definitive imaging deferred until postpartum. The patient subsequently developed progressive fluid overload, pulmonary oedema, and worsening renal dysfunction requiring HDU admission and intravenous diuresis. Emergency caesarean section was performed at 29+6 weeks' gestation in the maternal interest. Postpartum MRI confirmed extensive Charcot-related destruction of the right calcaneus. Management remains conservative, as reconstructive surgery would require extensive bone grafting and fixation with substantial risk of infection and amputation. In conclusion, this case highlights the diagnostic difficulty of Charcot neuroarthropathy in pregnancy and importance of early consideration in women with longstanding diabetes, severe peripheral neuropathy and new foot symptoms.

P133 Case Report: Congenital hypogonadotropic hypogonadism due to a homozygous TACR3 variant diagnosed during mini-puberty

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A 13-month-old male, the first child of consanguineous parents of Afghan origin, was referred at 3 months with genital underdevelopment identified neonatally. He was born at term following an uncomplicated pregnancy, with normal development and no dysmorphic features. Examination demonstrated a stretched penile length of 16 mm, an underdeveloped scrotum and bilaterally palpable testes. During mini-puberty, luteinising hormone and follicle-stimulating hormone were undetectable, with testosterone <0.4 nmol/L. Thyroid function and insulin-like growth factor-1 were normal, confirming otherwise normal pituitary function. Anti-Müllerian hormone and inhibin B were within reference ranges, indicating preserved Sertoli cell function. Chromosomal microarray was normal, but demonstrated multiple regions of homozygosity, associated with increased risk of recessive disorders. GnRH stimulation elicited a rise in LH and FSH (FSH-predominant). HCG stimulation produced a reasonable testosterone response (peak 3.8 nmol/L), localising the defect to the hypothalamus. Three monthly intramuscular testosterone injections (25 mg x3) increased stretched penile length to 36 mm. Growth and development remain otherwise normal. Genetic testing identified a homozygous pathogenic TACR3 variant (c.992G>A; p.Trp331*), confirming autosomal recessive congenital hypogonadotropic hypogonadism. Parental testing confirmed heterozygous carrier status. MRI brain is pending and the family has been referred for genetic counselling. This case highlights the importance of recognising absent mini-puberty as an early marker of congenital hypogonadotropic hypogonadism. Dynamic endocrine testing aids localisation of the defect and enables timely testosterone therapy, resulting in favourable early clinical outcomes. Early genetic diagnosis facilitates genetic counselling for family planning.

P134 Case report: Iododerma eruption post radioiodine therapy for the treatment of grave's disease with post-exposure ANCA production.

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Iododerma is a rare halogen-induced dermatosis occurring following exposure to iodinated compounds. Few cases have been reported following radioiodine treatment. We present the case of a 73-year-old woman who developed a pruritic rash 24 hours after receiving radioiodine therapy for Graves' disease. Examination revealed erythematous papules on a background of confluent erythematous patches involving the antecubital fossae and dorsal aspects of both hands bilaterally. Investigations included a full blood count, renal profile, and autoimmune serology. ANCA testing demonstrated a positive titre of 44 with MPO positivity of 66; previous ANCA testing had been negative. Given the temporal relationship to radioiodine administration and the characteristic clinical appearance, iododerma was suspected. Early dermatology review supported the diagnosis, and treatment with oral prednisolone and topical betamethasone valerate was commenced. The rash resolved within one week of commencing steroid treatment. Iododerma is an uncommon adverse reaction to iodine-containing compounds and may mimic systemic vasculitis, Sweet syndrome, or disseminated infection. Previous case reports have described transient ANCA positivity in association with iododerma, possibly secondary to neutrophil degeneration and autoantibody production. Iododerma should be considered in patients presenting with a rash following radioiodine therapy, particularly when

accompanied by new ANCA positivity. Early dermatology involvement can facilitate diagnosis and management, and mild cases may respond rapidly to oral steroids or topical corticosteroid therapy alone.

P135 Case report: Early-onset hypertension revealing familial hyperaldosteronism type 1 - the importance of family history and genetic testing

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Familial hyperaldosteronism is a rare inherited form of primary aldosteronism that is frequently underdiagnosed. We present the case of a 23-year-old woman with hypertension diagnosed at age 16, initially treated with amlodipine.

Following nephrology investigations, renovascular and renal causes of hypertension were excluded, with normal renal function, electrolytes, renal imaging, magnetic resonance angiography, and echocardiography. Subsequent endocrine assessment revealed normal plasma metanephrines and normal cortisol suppression following a 1 mg dexamethasone suppression test. However, her aldosterone/renin ratio was elevated. A saline suppression test demonstrated incomplete suppression of aldosterone, confirming primary aldosteronism. CT scan of the adrenal glands showed no abnormalities. A strong family history of early-onset hypertension was noted, affecting her father, diagnosed at age 18, several paternal siblings, a 12-year-old cousin, and her paternal grandfather, who died from myocardial infarction at age 50. Genetic testing confirmed familial hyperaldosteronism type 1 (glucocorticoid-remediable aldosteronism), with subsequent positive testing in her father. While awaiting genetic testing results, her blood pressure was controlled with spironolactone and doxazosin. Following initiation of dexamethasone 0.125 mg daily, both antihypertensive agents were discontinued while maintaining normotension.This case highlights the importance of considering familial hyperaldosteronism in young patients with hypertension and a strong family history, as identification of glucocorticoid-remediable aldosteronism can enable targeted therapy and reduce the need for conventional antihypertensive treatment.

P136 Case Report: A Rare Functional Adrenal Oncocytic Neoplasm of Uncertain Malignant Potential with Androgen and Cortisol Co-Secretion

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Adrenal oncocytic neoplasms of uncertain malignant potential (AONUMP) are rare adrenal cortical tumours with distinct pathological features and more favourable prognosis compared with conventional adrenal cortical carcinoma (ACC). We present the case of a 41-year-old female with a 20-month history of progressive hirsutism (modified Ferriman-Gallwey score of 26) and a two-month history of left-sided abdominal pain. She has no clinical features of Cushing's syndrome. Biochemistry demonstrated markedly elevated testosterone 43nmol/L (0.4–1.7) and DHEAS >27umol/L (1.7-9.2) with low SHBG, LH, FSH and corresponding polycythaemia with haemoglobin 17.9g/dL (11.5–15). Cortisol was 271nmol/L following an ODST with ACTH of 6ng/L (7-63). Oestradiol, aldosterone-renin ratio and metanephrines were normal. CT adrenal revealed an 11.5x10cm heterogeneous enhancing mass in the left adrenal gland. MRI pelvis excluded ovarian pathology. She underwent left open adrenalectomy with subsequent normalisation of biochemical hyperandrogenism (testosterone 1.5nmol/L, DHEAS 1.5umol/L, SHBG 16.5nmol/L, FSH 9.2IU/L and LH 4.2IU/L. Postoperative steroid replacement was initiated. Histology revealed a 13cm AONUMP as it fulfilled one minor criterion (size >10cm) based on the Lin-Weiss-Bisceglia Criteria. Ki67 index was 4%. She will undergo imaging surveillance in accordance with the management of ACC, but is not currently for adjuvant treatment. This case demonstrated AONUMP as a distinct subtype of ACC, co-secreting androgen and cortisol. It is important to differentiate oncocytic variant from conventional ACC given its better prognosis and improved outcomes, with follow-up guided by ENSAT stage, resection status and Ki67 index.

P137 Case report: When History Repeats Itself: Recurrent Hypophysitis Following Immune Checkpoint Inhibitor Rechallenge

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Introduction: Immune checkpoint inhibitors (ICIs) have revolutionised cancer treatment but are associated with well-recognised immune-related adverse events, including endocrinopathies. Case Presentation: A 62-year-old woman with malignant melanoma, initially diagnosed in 2013 and treated with wide local excision and lymph node dissection, developed disease recurrence in 2019 and commenced nivolumab. Shortly thereafter, she presented with nausea and headaches. Investigations showed ACTH <1.0 pg/mL (7.2–63.3), morning cortisol 15 nmol/L, TSH 0.79 mU/L (0.27–4.2), free T4 13.98 pmol/L (11.9–21.6), FSH 26 U/L (25.8–134.8), LH 15.5 U/L (7.7–58.5), IGF-1 114 ug/L (42.2 - 169) . Pituitary MRI performed two months after symptom onset, was normal. A diagnosis of nivolumab-induced hypophysitis causing isolated ACTH deficiency was made, and physiological hydrocortisone replacement was commenced. Nivolumab was discontinued. Progressive metastatic disease prompted rechallenge with ipilimumab/nivolumab in 2026. After two cycles, she was admitted to her local hospital with severe nausea and headache. Pituitary MRI revealed pituitary enlargement with marked enhancement of the stalk and gland, consistent with recurrent acute hypophysitis. Repeat investigations showed TSH 0.15 mU/L, FreeT4 14.50 pmol/L, FSH 11.2 U/L, LH 3.8 U/L, Oestradiol <18.4 pmol/L (<18.4–505), GH 0.6 ug/L, IGF-1 108.1 ug/L and prolactin 94 mU/L (102-496) Conclusion: This case demonstrates recurrent hypophysitis following ICI rechallenge and underscores the importance of careful risk-benefit assessment, vigilant endocrine monitoring, and multidisciplinary decision-making when considering re-exposure in patients with prior immune-related endocrinopathies."

P138 Sitosterolaemia; A case report

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We report the case of an eight-year-old female noted to have significantly elevated fasting lipid profile while inpatient undergoing evaluation by ophthalmology for opacity in lower cornea of the left eye. This opacity had been present since three years of age. She had also been complaining of joint pains. The patient also underwent excision of a nodular lesion of leftbuttock a number of months earlier by her GP, pathology of whichcommented on foamy histiocytes, and was pathognomonic of a juvenile xanthogranuloma. Her Dutch Lipid Network score was 13, indicative of a definite diagnosis of familial hypercholesterolaemia (FH). The patient was initially treated with atorvastatin on the presumption of a diagnosis of definite FH. Initial testing for common variants relating to FH were negative for mutations in LDLR, APOB, PCSK9. Further genetic analysis revealed compound heterozygous mutation in the ABCG5 gene, pathogenic for sitosterolaemia. The patient was treated with dietary restriction of plant sterols and ezetimibe, and inhibitor of NPC1L1 protein. She underwent a CT coronary angiogram due to the high atherogenic risk with this disorder, which showed no coronary artery calcification. Establishing a clinical diagnosis of sitosterolaemia is difficult due to the rarity of the disease. Establishing a clinical diagnosis of sitosterolaemia is difficult due to the rarity of the disease. It has a prevalence of 1 in 200,000 people and can present similarily to FH. There is clinical variability in its presentation. Awareness of these rare treatable inherited lipid disorders Including clinical presenting features is important.

P139 Case Series: Familial isolated primary hyperparathyroidism secondary to a germline CDC73 whole-gene deletion

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Familial primary hyperparathyroidism (PHPT) is a rare inherited disorder that may occur in the setting of hyperparathyroidism-jaw tumour syndrome (HPT-JT) or familial isolated hyperparathyroidism (FIHP) due to pathogenic variants in the CDC73 gene. Whole-gene CDC73 deletions are rare and may not be detectable by conventional sequencing methods. We report a mother-daughter pair with FIHP caused by a heterozygous whole-gene CDC73 deletion. A 39-year-old woman with recurrent hypercalcaemia presented with abdominal pain and vomiting following cinacalcet non-adherence. Biochemistry revealed severe PTH-mediated hypercalcaemia (corrected calcium 3.17 mmol/L, PTH 17.7 pmol/L), with urinary calcium <2.5 mmol/24 hours. She was treated with intravenous zoledronate and fluids. Sestamibi scan was negative whereas 4D CT showed a rounded 7 mm nodule in the left tracheoesophageal groove, suspicious for an atypical parathyroid adenoma. Abdominal imaging revealed bilateral nephrocalcinosis and chronic pancreatitis, without renal or uterine tumours. Subsequently, her 18-year-old daughter was found to have PHPT (corrected calcium 3.07 mmol/L, PTH 225 pg/mL), with urinary calcium 7.6

mmol/24 hours, and renal calculi. Localisation studies identified a right-sided 2.2 cm parathyroid adenoma, for which surgery is planned. Genetic testing in the mother revealed a heterozygous whole-gene deletion of CDC73, confirming CDC73-related familial hyperparathyroidism. This case highlights the importance of genetic testing in patients with early-onset disease, severe hypercalcaemia, end-organ complications, or a positive family history. Identification of a germline CDC73 deletion has important clinical implications due to the increased risk of recurrent hyperparathyroidism, parathyroid carcinoma, renal and uterine tumours, and HPT-JT syndrome.

P140 Bone Turnover Marker-guided Zoledronic Acid Treatment in a Complex Case of Inoperable Primary Hyperparathyroidism and Osteoporosis: A Novel approach

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Primary hyperparathyroidism (PHPT) is primarily managed with parathyroidectomy; treatment options are limited in patients who are not surgical candidates. We report the case of an 89-year-old woman with inoperable PHPT complicated by recurrent hypercalcaemia in the setting of rebound remodelling from denosumab dosing, delirium, and acute kidney injury. Her comorbidities included vascular dementia, stage 4 chronic kidney disease, left nephrectomy for renal cell carcinoma, osteoporosis and pelvic fractures. Biochemistry demonstrated a parathyroid hormone level of 23.4 pmol/l (1.3-6.4 pmol/l), serum adjusted calcium of 4.14 mmol/l (2.20-2.60 mmol/l), 25-OH vitamin D of 62 nmol/L, and eGFR of 25 mL/min/1.73 m². Imaging identified a 42 × 15 × 8 mm left parathyroid adenoma posterior to the oesophagus, unsuitable for percutaneous ablation. The patient experienced nausea at cinacalcet doses higher than 30mg. Denosumab treatment was transitioned to zoledronic acid to prevent cyclic hypercalcaemia with rebound bone remodelling. Recurrent hypercalcaemia suggestive of early RANKL inhibition escape due to PHPT prompted earlier treatment than 6 months after last denosumab. Five renal-adjusted doses of zoledronic acid were administered over 2 months, guided by serial serum C-terminal telopeptide of type I collagen (CTX-I) measurements, which decreased from 1.01 to 0.511 ug/L (0.150-0.635), consistent with normalisation of bone turnover. Serum calcium stabilised between 2.56-2.78mmol/l and the patient remained clinically well. This case highlights CTX-I guided serial zoledronic acid treatment as a potential management strategy for refractory hypercalcaemia in the setting of inoperable PHPT and denosumab rebound remodeling.

P141 Case Report : Apparent Recovery of Parathyroid Function in Autoimmune Primary Hypoparathyroidism

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Autoimmune primary hypoparathyroidism is an uncommon cause of hypocalcaemia and is regarded as a permanent condition requiring lifelong calcium and active vitamin-D replacement. Recovery of parathyroid function has rarely been described. A 50-year-old female presented in 2016 with symptomatic hypocalcaemia with calcium levels as low as 1.30mmol/L. Initial investigations demonstrated hyperphosphataemia, hypomagnesaemia and an inappropriately low PTH of 7ng/L, reflecting primary hypoparathyroidism. She subsequently underwent duodenal biopsy confirming Coeliac disease. Her background history included asthma, eczema, premature menopause and osteoporosis. Management proved challenging due to marked sensitivity to minor changes in calcium replacement. Despite treatment with calcium and alfacalcidol, she experienced several episodes of hypercalcaemia-associated acute kidney injury. Renal biopsy in December 2016 demonstrated allergic-type tubulointerstitial nephritis. A strict gluten-free diet was introduced and calcium and active vitamin D replacement were carefully adjusted with close monitoring. Over subsequent years calcium homeostasis gradually improved. By 2024, renal function had normalised with creatinine of 79 μmol/L and calcium remained stable between 2.31-2.39mmol/L. PTH had increased to 51ng/L. By 2025, regular alfacalcidol had been discontinued and normocalcaemia maintained on calcium supplementation alone. She remained clinically well .Autoimmune primary hypoparathyroidism is usually considered irreversible, with lifelong replacement therapy required. Although coeliac disease and hypomagnesaemia may have contributed to the initial presentation, the rise in PTH and withdrawal of alfacalcidol are unusual. This highlights the importance of regular reassessment of treatment requirements and suggests that recovery of parathyroid function occurs in selected patients following severe autoimmune primary hypoparathyroidism.

P142 Central serous chorioretinopathy in cushing's disease

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Background: We report a case of cushing's disease complicated by bilateral central serous chorioretinopathy (CSCR).

Clinical Case: A 36-year-old female initially presented with recurrent metatarsal fractures, easy bruising, amenorrhoea and hypertension. Biochemical investigations confirmed hypercortisolism: 24 hr UFC 1069 nmo/l24 hr (RR < 180), 11 pm late night salivary cortisol 21 nmol/l (RR< 8), ACTH 44 ng/l (RR 7.2-63.3), 1mg ODST:8 am cortisol 159 nmol/L (RR < 50), 8 mg high dose ODST: 8 am cortisol 63 nmol/L (RR < 50.) MRI pituitary demonstrated two tiny (1mm-right and 4mm-central) equivocal foci. IPSS confirmed a strong central to peripheral ACTH ratio. Within one month post IPSS procedure she developed blurred vision bilateral central serous chorioretinopathy was confirmed. She underwent transsphenoidal pituitary surgery (TPS) initially right and then left hypophysectomy. Histopathological examination demonstrated ACTH-positive pituitary tissue (left) with early remission (day 5 post TPS 8 am cortisol: 29 nmo/L). Follow-up ophthalmological assessment demonstrated improvement, with regression of retinal fluid at four months which would be expected as cortisol levels driving the condition reduced. Discussion: Central serous chorioretinopathy is the fourth most common retinal disease worldwide. Studies have shown that approximately 5% of those with Cushing's disease will develop CSCR, directly associated with hypercortisolism. It is hypothesised that increased cortisol exposure can caused CSCR in these patients due to a local ocular abnormality. Conclusion: We highlight the importance of recognising visual symptoms in patients with Cushing's syndrome and the value of early ophthalmological review.

P143 Diffuse scalp hair loss after transsphenoidal surgery in acromegaly

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Background: We report a case of an acromegalic patient with early remission after transsphenoidal surgery who reported diffuse scalp hair loss. Clinical Case: A 68-year-old female presented with macroglossia and interdental spacing. Subsequent investigations confirmed growth hormone excess: insulin growth factor-1 (IGF-1) 144nmol/L (RR 7.1-21.5), nadir GH after oral glucose tolerance testing (OGTT) 18.8 ug/L (< 0.4), anterior pituitary function was normal. MRI showed a pituitary macroadenoma. She underwent successful transsphenoidal surgery, histology was positive for GH/prolactin staining. Four month post-operative MRI showed no residual tumour with initial remission: nadir GH < 0.3 ug/L (RR < 0.4) during OGTT. Within three months after surgery she developed significant scalp hair loss and now requires the use of a wig, she attended dermatology who diagnosed telogen effluvium. Discussion: Diffuse scalp hair loss (telogen effluvium) can occur after successful pituitary surgery in acromegaly. Putative mechanisms include: as a direct result of the stress of surgery/general anaesthesia or due to the dramatic changes in endocrine status (from a sudden decrease in GH/IGF-1 levels leading to disease remission). In the largest series to date in post operative Japanese acromegalic patients, moderate to severe hair loss was reported in 44% patients (213/484 patients) and was more common in women and in cured patients. Shedding in telogen effluvium typically occurs over 3 months with notable regrowth within 12 months if the inciting trigger is removed. Conclusion: Patients with acromegaly should be counselled on the post-operative risk of hair loss after successful pituitary surgery.

P144 From Adrenal Incidentalomas to Molecular Diagnosis: ARMC5-Associated Primary Macronodular Adrenal Hyperplasia

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Background: Primary macronodular adrenal hyperplasia (PMAH) is a rare cause of ACTH-independent cortisol excess, frequently linked to pathogenic ARMC5 variants. Increased cross-sectional imaging has elevated detection in patients presenting with bilateral adrenal incidentalomas and mild autonomous cortisol secretion. Case Presentation: A 38-year-old

man with well-controlled hypertension underwent an abdominal CT for suspected appendicitis, which incidentally revealed bilateral adrenal nodules. An MRI confirmed multiple bilateral nodules measuring 2.5 cm and 2.7 cm on the left, and 1.6 cm and 1.8 cm on the right, consistent with benign adenomas. He exhibited no overt Cushingoid features. Endocrine evaluation demonstrated ACTH-independent cortisol secretion. Repeated 1 mg overnight dexamethasone suppression testing showed persistent non-suppression with post-dexamethasone cortisol levels of 175–234 nmol/L (reference <50 nmol/L). Plasma ACTH was suppressed at <0.7 pmol/L (reference 1.1–13.2 pmol/L), and DHEAS was low at 1.2 (reference 2.41–11.60). Primary aldosteronism was excluded. Genetic testing identified a heterozygous pathogenic ARMC5 frameshift variant c.328del p.(Ala110Profs*27). The patient remains clinically stable under endocrine surveillance without progression, with cascade screening planned for first-degree relatives. Discussion & Conclusion: This case highlights the variable, subclinical presentation of PMAH. Evaluating cortisol autonomy is essential in patients with bilateral adrenal incidentalomas, even without classical Cushing's syndrome features. Identifying an ARMC5 mutation provides a definitive molecular diagnosis that guides long-term surveillance and cascade family testing. Bilateral adrenal nodularity with ACTH-independent cortisol secretion should always prompt consideration of PMAH and genetic testing.

P145 Gain of function in the adolescent - an unusual case of hyperinsulinaemic hypoglycaemia: Case Report

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A 17-year-old female presented to the emergency department with an eight-month history of syncopal episodes, weight loss and fatigue. Childhood development was normal and menarche was at age 16. On examination she was alert, not pigmented and had no syndromic features. Capillary glucose was 1.7mmol/L with low ketones, serum cortisol (40nmol/L) and plasma ACTH (7 ng/L). Despite treatment with hydrocortisone, hypoglycaemia persisted. HbA1c was <20 mmol/mol and venous glucose 2.0 mmol/L paired with inappropriate insulin (16.7mU/L) and C-peptide (4.4 ug/L) levels. Anterior pituitary function was otherwise unremarkable and MRI pituitary, pancreas and endoscopic ultrasound were negative. Insulin antibodies and sulphonylurea screen were negative. Historic notes showed normal glucose results during a paediatric admission with bronchiolitis. A germline genetic screen was positive for a gain of function missense variant of glucokinase (GCK): Thr65Ile (T65I). GCK is the body's glucose sensor: gain of function mutations result in a pathologically low glucose set point for insulin secretion (anti-thesis of GCK-MODY). Oestrogen is known to upregulate GCK activity during puberty. Nocturnal IV glucose was required, then cornflour, diazoxide, amiloride and octreotide. Currently she has improved hypoglycaemic awareness and glucose time in range. However, hypoadrenalism has persisted and may relate to dysregulated GCK activity in the hypothalamic arcuate nucleus. SVT episodes required ablation treatment. Persistent symptoms include bloating, nausea and poor sleep. This is an unusual case of congenital hypoglycaemia presenting to adult services with some symptoms possibly due to extra-pancreatic GCK activity rather than medication side-effects.

P146 Looks Neurological, Turns Endocrine: A Rare Case of Normokalaemic Thyrotoxic Periodic Paralysis

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Background: Thyrotoxic periodic paralysis (TPP) is a rare complication of thyrotoxicosis. It usually presents with episodes of muscle weakness and hypokalaemia. Diagnosis can be delayed when potassium levels are normal or only mildly reduced. Case: A 36-year-old male presented with a three-week history of recurrent episodes of severe muscle weakness, lasting 15 minutes to 1 hour, after meals and exercise. During the spells his mobility was reduced to eye movements, and was noted to have areflexic flaccid paralysis, with power reduced to 1/5 in all muscle groups. No sensory, cerebellar, meningeal or cranial nerve signs were noted during these episodes. He had no symptoms of hyperthyroidism. Examination revealed sinus tachycardia, and thyroid gland was mildly enlarged. Work-up including MRI brain/cervical spine, autoimmune, paraneoplastic antibody screening, and creatine kinase, were unremarkable. Thyroid function demonstrated free T4 35.9 pmol/L, free T3 16.7 pmol/L and TSH <0.01mIU/L. Urea & electrolytes were normal with serum potassium levels of 3.5-4.5 mmol/L. TSH receptor antibodies were negative. Periodic paralysis resolved promptly with propranolol, and no further episodes occurred after initiation of carbimazole. At one-month follow-up, thyroid function had improved (free T4 20.4 pmol/L, free T3 5.4 pmol/L,

TSH 0.46 mIU/L), with no further episodes of weakness. Conclusion: We highlight an unusual first presentation of thyrotoxicosis with periodic paralysis, which responded rapidly to betablocker treatment, along with complete remission of symptoms with antithyroid therapy. This case demonstrated that TPP can occur despite normal serum potassium levels.

P147 Suspected Exogenous Glucocorticoid Exposure from an Online Testosterone Preparation Presenting as Cushing Syndrome in a Transgender Man

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Gender-affirming hormone therapy is an essential component of care for transgender individuals. Patients may obtain hormone preparations from unregulated online sources before accessing gender-affirming care. This may increase the risk of counterfeit or adulterated products and endocrine complications. A 28-year-old transgender man was admitted to a tertiary centre following transfer from a Model 2 hospital with severe hypokalaemia. While awaiting assessment by the public gender-affirming service, he had self-administered testosterone purchased online since November 2025, initially using Sustanon before changing to what he believed was testosterone cypionate in April 2026. Following three weekly injections of the new preparation, he developed Cushingoid features and a 10 kg weight gain over one month. Biochemical investigations demonstrated severe hypokalaemia (serum potassium 2.3 mmol/L), requiring intravenous and oral replacement. Serum cortisol was elevated (2,600 nmol/L), TSH was suppressed (0.02–0.05 mIU/L) with normal free thyroxine, and HbA1c was 53 mmol/mol with overt hyperglycaemia. Given the temporal relationship between symptom onset and the change in testosterone preparation, exposure to an adulterated glucocorticoid-containing product was suspected. Testosterone was discontinued, and chemical analysis of the preparation is ongoing in collaboration with the hospital pharmacy department. This case highlights an unusual endocrine complication associated with an unregulated online hormone preparation. Clinicians should consider counterfeit or adulterated hormone products when evaluating endocrine syndromes in patients using non-prescribed hormones. The case also underscores the importance of supporting patients to access supervised gender-affirming endocrine care and discussing the risks associated with unregulated hormone preparations.

P148 Revisiting a Longstanding Diagnosis: HNF4A-MODY Identified After 45 Years of Insulin Therapy Resulting in Marked Reduction in Insulin Requirements

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Maturity-onset diabetes of the young (MODY) is a monogenic form of diabetes that is frequently misdiagnosed as type 1 or type 2 diabetes. Delayed diagnosis may lead to unnecessary insulin therapy and suboptimal glycaemic control. A 58-year-old woman had been treated as having type 1 diabetes since the age of 13 years. Since diagnosis islet antigen autoantibody testing had been conducted and was negative (Anti GAD, ZnT8 and IA2). Her diabetes was complicated by background diabetic retinopathy and previous right hallux amputation. She required intensive insulin therapy with a total daily dose of approximately 115 units to maintain optimal blood glucose control. Following the diagnosis of HNF4A monogenic diabetes in her son, cascade genetic testing was performed and confirmed the presence of the same HNF4A pathogenic variant. A c-peptide level of 0.43 nmol/L indicated preserved endogenous insulin secretion. Sulfonylurea therapy was introduced while insulin doses were significantly reduced. She was also commenced on GLP-1 receptor agonist and SGLT2 inhibitor therapy to augment her glycaemic management. Over subsequent follow-up, her total daily insulin requirement fell from 115 units to 0 units while maintaining good diabetes control with continuous glucose monitoring demonstrating time-in-range exceeding 70%. HNF4A monogenic diabetes is characterised by preserved endogenous insulin secretion and excellent responsiveness to sulfonylureas. Recognition of HNF4A monogenic diabetes allowed personalised therapy and the cessation of insulin therapy >45 years following its introduction. This case illustrates merit in revisiting remote type 1 diabetes diagnoses.

P149 Case Report: When low isn’t low: Interpreting HCL data during prolonged cardiac arrest

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People with diabetes account for 17% of acute hospital admissions. Hypoglycaemia is associated with poor outcomes after out-of-hospital cardiac arrest (OHCA), yet continuous glucose monitoring (CGM) and capillary glucose testing may be unreliable during prolonged low-flow states. We present a case in which distinguishing true hypoglycaemia from perfusion-related artefact proved challenging. A previously well 34-year-old man with T1DM (HbA1c 57 mmol/mol), managed with a Medtronic 780G hybrid closed-loop system, sustained an OHCA. Bystander CPR commenced immediately and continued until emergency services arrived. Resuscitation extended beyond two hours, including 22 defibrillation shocks, 24 doses of adrenaline, and amiodarone. Pump interrogation showed a small, appropriate user-initiated meal bolus (1.5 units for 21g carbohydrate) 10–15 minutes before collapse, with minimal automated insulin delivery during the recorded low, making iatrogenic hypoglycaemia an unlikely cause. CGM recorded hypoglycaemia from 20 minutes into the arrest, persisting for almost two hours.Capillary glucose at 133 minutes was 3.2 mmol/L, prompting administration of 10% dextrose; arterial glucose rose to >20 mmol/L, mirrored by the sensor trace, around the time of return of spontaneous circulation. Imaging demonstrated resolving myocarditis without coronary artery disease. The person made a complete neurological recovery. Hypoperfusion during prolonged cardiac arrest can render both CGM and capillary glucose unreliable. In low-flow states, arterial or laboratory glucose should be regarded as the reference standard, interpreted alongside pump data and clinical context. A low reading should not anchor the team on hypoglycaemia as the cause of arrest; here, myocarditis was the likely aetiology.

P150 Sugars and Stroke Mimics: Cortical Laminar Necrosis Secondary to Hyperosmolar Hyperglycaemic State

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A 71-year-old female patient presented with a right hemiparesis, expressive aphasia and vomiting. Clinical suspicion was that of a left middle cerebral artery (MCA) syndrome. Her medical history was remarkable for Type Two Diabetes Mellitus (T2DM), with suboptimal adherence to medications and HbA1c of 152 mmol/mol. The index National Institutes of Health Stroke Scale (NIHSS) was 18. She was profoundly hyperglycaemic, with a capillary blood glucose of 40.7mmol/L. Ketones peaked at 1.7mmol/L. Imaging revealed no intracranial haemorrhage, large vessel occlusion or established infarct. Biochemical criteria for HHS were fulfilled, and the patient was started on the hospital HHS protocol. A concurrent diagnosis of acute ischaemic stroke was suspected, and a labetalol infusion was commenced to treat significant hypertension. The patient's BP remained resistant to treatment, which precluded thrombolysis. As the HHS resolved and glycaemic control was achieved, the neurological deficits improved. After 48 hours, the patient's hemiparesis had resolved. A mild dysarthria and expressive aphasia remained, NIHSS 3. An MRI brain demonstrated foci of left occipital and left parietal infarcts. Given the temporal relationship between correction of HHS and neurological recovery, a diagnosis of Cortical Laminar Necrosis in the context of severe hyperglycaemia was made. This patient's presentation enforces the importance of the recognition of the neurological complications of HHS in older adults. Recognition of these symptoms as a stroke mimic supports appropriate management of HHS in the hyperacute setting and allows for appropriate patient selection for reperfusion therapies and secondary prevention strategies.

P151 Case Study: Stress-Induced Hyperglycaemia and Recurrent Ketoacidosis Mimicking Type 1 Diabetes Mellitus

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Midland Regional Hospital, Mullingar, County Westmeath We report a 54-year-old woman treated for type 1 diabetes mellitus (T1DM) for seven years after presenting with diabetic ketoacidosis (DKA), but subsequently found to have normoglycaemia. She presented to the Emergency Department (ED) in 2017 with vomiting on a background of alcohol excess and physiological and emotional stressors. Investigations revealed hyperglycaemia (21.7 mmol/L), ketonaemia (6.4–7.2 mmol/L), metabolic acidosis (pH 7.28, bicarbonate 12.2 mmol/L), and HbA1c (33mmol/mol). The patient was treated per the local DKA protocol, and discharged on basal-bolus insulin. Over the following years, the patient had poor clinic attendance, but multiple ED presentations with vomiting and ketonaemia in the setting of alcohol excess. The patient re-engaged with the

diabetes service after becoming alcohol abstinent. Despite minimal exogenous insulin (0.12 units/kg/day), was noted to have maintained excellent HbA1c (32–37 mmol/mol) in September 2024. Diabetes autoantibodies were negative and C-peptide levels (2.25 µg/L (ref, 1.10–4.40)) indicated preserved beta-cell function. Additionally, no further episodes of ketonaemia occurred after alcohol cessation. Insulin was stopped, yet the patient maintained normal range Hba1c (37 mmol/mol), and the diagnosis of diabetes mellitus was revised. We suspect that this patient experienced recurrent ketonaemia in the setting of alcohol excess and stress-induced hyperglycaemia. The isolated occurrence of hyperglycaemia in 2017 was not indicative of underlying diabetes mellitus. In this report we explore potential explanations for the unusual features in this case, which highlights the need for continuous diagnostic vigilance during follow-up of patients with T1DM.

P152 Case Report: type 1 diabetes mellitus following recurrent gestational diabetes

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We report the case of a 32-year-old woman with a history of gestational diabetes mellitus (GDM) in two previous pregnancies who was subsequently diagnosed with type 1 diabetes mellitus (T1DM). During her first pregnancy (September 2019), her BMI was normal at booking (24.4 kg/m2); oral glucose tolerance test (OGTT) at 25+4 weeks demonstrated fasting, 1-hour, and 2-hour glucose values of 4.95, 10.36, and 9.11 mmol/L, respectively. GDM was managed with lifestyle modification. In her second pregnancy (October 2021), an OGTT at 20+3 weeks showed fasting, 1-hour, and 2-hour glucose values of 5.84, 13.3, and 12.9 mmol/L, respectively. Insulin therapy was required. Postpartum HbA1c was 47 mmol/mol. Her father had type 2 diabetes and her son was diagnosed with T1DM aged 3. In December 2024, she presented to the Emergency Department with a 3-week history of polyuria, polydipsia and 8 kg weight loss. Investigations demonstrated hyperglycaemia, positive urine ketones but normal pH. HbA1c was 100 mmol/mol. Glutamic acid decarboxylase antibodies were 44 IU/mL (reference <7 IU/mL). Based on the clinical presentation and positive antibody, a diagnosis of T1DM was made. We believe that GDM in this case was due to evolving T1D and that it highlights the need to question the cause of atypical GDM. Autoantibody screening during/after pregnancy should be considered in patients with features atypical for GDM, including younger age, lower BMI, early insulin requirement or ketonuria/ketosis. Early recognition may facilitate timely diagnosis of T1D and improve outcomes.