ABCD Spring Meeting Abstracts

The meeting in Cardiff this spring saw several very interesting and noteworthy pieces of work being undertaken across the UK demonstrating the diverse realm of interests under the umbrella of clinical diabetes and endocrinology.

Type 2 diabetes, basal insulin and the experience of hypoglycaemia: Insights from the patient perspective
Hudson et al. Guildford

This survey aimed to explore the experience of patients with type 2 diabetes taking basal insulin and to determine the impact of injection and come up with some interesting findings.

<table>
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<th>Reasons for not reporting hypoglycaemia (%)</th>
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<tr>
<td>It's just part of having diabetes 52%</td>
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<tr>
<td>There's nothing they can do 26%</td>
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<tr>
<td>It was probably my fault 21%</td>
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<tr>
<td>Don't think it's important 20%</td>
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<tr>
<td>Worried I might lose my driving license 12%</td>
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The authors concluded that the high prevalence of hypoglycaemia, under-reporting of events and attitudes towards them coupled with the finding that very low percentages of patients felt empowered in treatment decisions was disappointing. It may be the case that shared-decision approaches including greater patient involvement coupled with once-daily regimens could lead to better patient satisfaction and treatment adherence.

A pilot project in the use of an inpatient diabetes risk scoring tool
Choudhury, M et al. Cardiff

An inpatient diabetes risk scoring system was piloted at University Hospital Wales to assess patients who are at increased risk of adverse glycaemic events related to their diabetes.

- The online risk tool was designed to be universally available within the hospital intranet system and accessible on every ward.
- It has the benefit of allowing diabetes specialists to communicate inpatient diabetes interventions using a paper-free system.

The aim of the pilot study was to identify patients experiencing hyper and hypoglycaemia and providing intervention to prevent further glycaemic related complications and develop an inpatient electronic diabetes database. Ultimately the project demonstrated the utility of a web-based tool accessible on the hospital intranet for the risk assessment of inpatients with diabetes. The data collected from this study, in addition to real world experience will be utilised to guide future inpatient service evolution and develop a closed loop referral and risk assessment system when combined with bedside glucose testing data.

Caution the failed pancreas transplant
Choudhary, M et al. Cardiff

This interesting case report describes the clinical story of a patient with presumed type 1 diabetes who had progressive renal failure and underwent a pancreatic transplant in 2006. He was diagnosed with Alström syndrome, a rare autosomal recessive condition which can predispose to early sight loss, insulin resistance, obesity and renal failure. Pancreatic failure post transplantation may not always necessitate initiation of insulin therapy as oral therapy, such as metformin, plus lifestyle change, were used in this particular case to maintain good glycaemic control.

Audit of the outcomes of adding an SGLT2 inhibitor to insulin in sub-optimally controlled type 2 diabetic patients
Cozma et al. Bridgend

The objectives of this audit were to review the outcomes of adding an SGLT2 inhibitor (dapagliflozin or canagliflozin) to insulin, in type 2 diabetic patients, in a secondary care setting in order to assess which patients benefited most from the combination and identify baseline predictors of response.

They found that adding dapagliflozin or canagliflozin to insulin in our obese type 2 diabetic population led to significant improvements in HbA1c in the majority of patients with an associated weight loss of around 1.8%. However, around a third of the patients gained weight, suggesting the response to the combination needs to be monitored and the drug discontinued early in unresponsive subjects.

All Wales Audit and real world outcomes on the use of dapagliflozin in the management of type 2 diabetes
Eligar et al. Cardiff

The purpose of this audit is to determine the patient groups in which dapagliflozin is prescribed across primary and secondary care in Wales and the real world outcomes of this treatment. Hospitals and General Practice will record baseline data when dapagliflozin is initially prescribed and repeat data collection by recalling the patient following 4–6 months of treatment. The anonymised data sets will be collected locally and collated centrally at the University Hospital of Wales.

Dapagliflozin has been beneficial as an add-on therapy or as a substitute to existing treatment. It was generally well tolerated. 16% of patients stopped it due to side effects including osmotic symptoms, urinary and genital infections: 6 patients reported minor hypoglycaemic events. There was a statistically significant drop in HbA1c and, as expected, greater reductions in HbA1c were noted in patients with higher HbA1c levels. Our data suggest that dapagliflozin will be beneficial in poorly controlled diabetics and can be used as a possible insulin sparing option in selected patients.
Cushing’s syndrome and broken bones  
*Kumar et al. Swansea*  
A 55 year old male presented to his GP with low backache and pain radiating down his left lower limb for 12 months. He was treated as sciatica and referred to orthopaedics for further investigations. He was found to have multiple vertebral wedge fractures on imaging as well as a 45 mm heterogeneously enhancing left adrenal adenoma.  
He was reviewed in the endocrine clinic after 3 weeks. He had classical clinical features of Cushing’s syndrome with cushingoid facies, central obesity, purple striae, proximal myopathy and extensive bruising on his arms and thighs. Cushing’s syndrome is an important yet rare cause of secondary osteoporosis.  
- 30–50% of patients with Cushing’s syndrome experience fractures, particularly in the vertebral body, although reports of multiple pathological fractures are rare.  
- Osteoporosis from hypercortisolism involves multiple mechanisms including increased apoptosis of osteocytes and osteoblasts, stimulation of RANKL and osteoclasts and suppression of gonadotropins and impaired calcium absorption.  
- Bone loss affects trabecular bone rather than cortical bone and is more frequent in adrenal mediated Cushing’s syndrome.  
- Increased fracture risk will decrease to normal within 1–2 years following definitive cure.

Cardiovascular risk prediction in subjects at high risk of type 2 diabetes mellitus: Do different risk predictors give the same result?  
*Lomova-Williams et al. Swansea*  
Identifying cardiovascular (CV) risk is essential in the management of patients at high risk of developing type 2 diabetes. Methods routinely used in primary care to estimate 10-year CV risks include Framingham, QRISK CVD, JBS3, ASSING. The aim of this project was to examine differences in 10-year predicted CV risk using these methods in a sample of patients identified within a primary care practice known to be at high risk of developing type 2 diabetes.  
- Significant differences exist between routinely available risk engines to predict 10-year CV risk in patients at high risk of but without type 2 diabetes.  
- Targeting such patients with CV risk-reducing treatments might lead to prescribing inertia and unnecessary costs.  
- Therefore the choice of risk engine may influence prescribing practice, costs and long-term CV outcome.

Do cardiovascular risk factors predict peripheral vascular disease in type 2 diabetes mellitus?  
*Lomova-Williams et al. Swansea*  
Two study samples were examined with the following aims:  
1. To investigate the correlation between cardiovascular (CV) risk factors and toe brachial index pressures (TBPI).  
2. To investigate the correlation between cardiovascular (CV) risk factors and Doppler measurements.  
In both study samples the researchers found that no difference was observed in CV risk factors and UKPDS risk between the groups. However there was a significant correlation in the TBPIs and Doppler signals between the two feet.

HES data, patient experience and local statistics in diabetes foot care in the South West: can peer reviews of diabetes foot care services improve outcomes?  
*Paisey et al. South West Strategic Clinical Network*  
The goal of this project was to make multidisciplinary team (MDT) peer review visits to all 11 CCGs (14 acute trusts) in the South West 2014–2015 To chart progress from previous NHS diabetes reviews 2012–2013.
Awareness of driving requirements for people with diabetes using insulin: Health care professional perspectives  
Min et al. Swansea

The aim of this study was to assess the experience of primary and secondary health care professionals (HCPs) and their clinical practice regarding current DVLA regulations and recommendations, via a web-based anonymous questionnaire survey which included six case scenarios loosely adapted from clinic encounters. The majority of HCPs had consistent recommendations for Group 1 licence holders.

- Conflicting areas were Group 2 licence, previous history of severe hypoglycaemic episodes and hypoglycaemia unawareness.
- Up to 20% of HCPs were unaware of the cut-off blood glucose level for definition of hypoglycaemia and the recommended minimal blood glucose level for safe driving.
- Approximately 10% of HCPs were unaware of the recommended blood glucose testing frequency while driving.

The authors conclude that there are variations in clinical practices and deficiencies in knowledge regarding DVLA recommendations and requirements for drivers with insulin-treated diabetes and that there is an urgent need for education of the current driving regulations for diabetes amongst HCPs.

Local pregnancy and fetal outcomes in gestational diabetes mellitus in Gloucestershire  
Renninson et al. Gloucestershire

An audit for service and therapy evaluation in gestational diabetes mellitus (GDM) at Gloucestershire Royal Hospitals Trust was conducted to provide data regarding local pregnancy and fetal outcomes and to ascertain if management changes have improved outcomes in the longer term.

The number of patients seen annually with GDM has increased each year (almost doubling in 10 years). Tighter glycaemic control means more patients receive hypoglycaemic agents (37% in the 1st audit to 77% in the latest one), resulting in significantly fewer macrosomic babies (28% to 6%). Significantly fewer emergency caesarean sections are being performed (p = 0.08) with the majority now being born by spontaneous vertex delivery (39% to 56%). Reduction in perinatal complications provides a cost advantage to subsidise the GDM clinics. Only 6% of babies were admitted to the Special Baby Care Unit. 81% of women had their 6-week postnatal fasting glucose; 15.7% of these were abnormal, which suggests they have at least impaired glucose tolerance. Identification and alteration of lifestyle behaviours has significant benefits for the long-term morbidity of the mother and fetus and must be encouraged.

Diary 2016

10 February  
Monogenic diabetes symposium  

18 February  
Managing complex long term conditions (LTC) and multi-morbidity  

21-22 April  
ABCD spring meeting, Manchester

10-14 June  
American Diabete Association 76th Scientific Sessions, New Orleans, LA, USA  

12-16 September  
European Association for the Study of Diabetes, Munich, Germany  

If you are looking for a specific date, sub-specialty or place for conference, one of the following sites might help –  
http://www.doctorsreview.com/meetings  
http://www.endocrinology.org/meetings/world.aspx  
http://www.ese-hormones.org/meetings/World.aspx  
http://www.medical.theconferencewebsite.com/conferences/endocrinology-and-diabetes

WANTED - EDITORIAL REGISTRAR FOR BJDVD

The British Journal of Diabetes is the society journal of the ABCD, which seeks to promote the interests of practicing clinicians and keep abreast of the latest developments and guidance.

We are looking for a new member of the editorial team to support the work of the journal and get involved with several of the production aspects. This post would ideally suit a higher specialist trainee in Diabetes & Endocrinology with some experience of editing / reviewing / publishing and research. Bright ideas and energy are a must.

For further information / applications please contact editorpg@bjdvd.com along with a covering letter and a copy of your CV