ABCD Spring Meeting, Renaissance Manchester Hotel, 21–22 April 2016, in conjunction with the North West Endocrine Society

A lot of delegates took full advantage of the newly configured meeting to maximise their CPD by attending the inaugural ABCD IPN-UK conference on 21 April. Those who could not be spared from the workplace for the whole day took advantage of the Roche-sponsored Insulin Pump Symposium, and were treated to a practical exposition of how to incorporate bolus advisors into pump practice by Karen Spowart. Pratik Choudhary then introduced the concept of intraperitoneal insulin infusion as a potential means of achieving better glucose control and the DiaPort system designed to deliver it.

After the association's Annual General Meeting, Dr Gerry Rayman accepted the second Rowan Hillson Insulin Safety Award from Dr Hillson herself for the utilisation of a networked ward blood glucose monitoring system to reduce the incidence of severe hypoglycaemia for inpatients at Ipswich Hospital.

We were sorry that Russell Drummond, ABCD's meetings secretary, was not able to attend to see the success of the programme he had put together. Once again each presentation had a song title assigned to it that presenters embraced to a varying extent. Kevin Fernando got the conference off to a lively and thought-provoking start. A GP working in Scotland with a special interest in diabetes and medical education, he challenged us to think what we as diabetologists could do for primary care. His suggested model of joint community clinics with GPs and diabetologists working together generated polarised comments from the floor. He revealed the potential academic utility of the Clinical Practice Research Datalink as a database for primary care across the UK. His presentation was punctuated with eminently useable quotations.

Peter Trainer came from Manchester's Christie Hospital to give a masterful update about acromegaly. The results of trans-sphenoidal surgery are much better when done by surgeons who do a lot of procedures. Even so, large tumours will not be cured by surgery, so is it acceptable to use octreotide only? The message seems to be that primary medical therapy is worthwhile, especially if the growth hormone is less than 25 µg/L, but if it is greater than 50 µg/L only one-third of cases return to normal. Medical treatment prior to surgery seems not to guarantee cure either. Pasireotide is more diabetogenic than octreotide. Oral octreotide is being evaluated, as are anti-sense drugs directed at the growth hormone receptor.

So what do cardiologists think about diabetes trials? Not much if Mark Petrie is to be believed. They don't usually measure HbA_{1c}, they regard UKPDS as having raised a cardiac concern about sulphonylurea and metformin in combination, and they have 'no idea' what the new diabetes drugs are! They are, however, very interested in cardiovascular outcome trials such as PARADIGM-HF which showed that sacubitril/valsartan, compared with an angiotensin-converting enzyme inhibitor, significantly reduced rates of the composite outcome of cardiovascular death and hospitalisation for heart failure, rates of the component outcomes and of all-cause mortality in patients with symptomatic chronic heart failure with reduced ejection fraction. Although recent and current cardiovascular outcome trials of diabetes drugs are based on major adverse cardiovascular events (MACE), the definitions of the included primary events are not universally agreed and this can change the results. Furthermore, the CALIBER programme looking at a cohort of 1.9 million people with type 2 diabetes showed that heart failure and peripheral arterial disease are the most common initial manifestations of cardiovascular disease, which implies that MACE does not include the most relevant set of outcomes.

The double act of Paddy Mark, nephrologist, and Peter Winocour, diabetologist, did a splendid job of publicising the new ABCD-Renal Association guideline for the Management of Diabetes on the Haemodialysis Unit. This NICE-accredited guideline is a much needed resource, and recommends more relaxed glycaemic targets for this group of patients who are susceptible to hypoglycaemia, discusses preferred antidiabetic medications and changing doses for dialysis versus non-dialysis days. Lipid management was discussed and we were reminded that there is no evidence of benefit from starting lipid lowering medication after haemodialysis. The guideline is on the JBDS-IP section of the ABCD website.

Another Mancunian presenter, Steve Ball, had the challenge of explaining hyponatraemia to Homer Simpson. To this reporter it was a matter of 'Too many cans of beer drunk too quickly dilutes the plasma', but fortunately it was not as simple as this, and we were treated to a guided tour of the European Society of Endocrinology 'Clinical practice guideline on diagnosis and management of hyponatraemia' by one of its authors. A key question is whether the patient is acutely unwell as a result of hyponatraemia. If so, then urgent treatment with hypertonic saline is indicated in a closely monitored environment. The rate of rise of serum sodium is critical to avoid the dreaded complication of osmotic demyelination syndrome. In the absence of symptoms, the approach is directed to finding and treating the cause of the hyponatraemia. Tolvaptan does not seem to be the perfect solution for syndrome of inappropriate antidiuretic hormone secretion (SIADH).

We were then treated to an update on the management of common endocrine disorders in pregnancy by David Carty. This was full of pragmatic recommendations – propylthiouracil pre-pregnancy and first trimester and carbimazole thereafter seems the best way to manage the embryopathic potential of carbimazole versus the hepatotoxic potential of propylthiouracil. There was a scholarly analysis of the importance of subclinical hypothyroidism on fertility, childhood cognitive function etc, concluding with a recommendation to treat women with a thyroid-stimulating hormone level >2.5 without a need to measure thyroid antibodies. The TABLET trial is designed to tell us whether treating women with positive thyroid antibodies is of value.

ABCD's first research project, REVISE Diabesity, an open-label multicentre parallel group randomised controlled trial of Endobarrier implantable duodenal-jejunal liner alone or with liraglutide 1.2 mg daily versus liraglutide only 1.8 mg daily in obese patients with type 2 diabetes who had not achieved target weight loss or HbA_{1c} despite at least 6 months treatment with liraglutide is building to a climax. We were treated to interim 1-year results from Piya Sen Gupta, Barbara McGowan and Bob Ryder on behalf of the research team. This

showed that Endobarrier treatment was associated with weight loss and improved HbA_{1c}, especially when liraglutide treatment was continued. There were two cases of liver abscess in the 48 recipients of Endobarrier. Ultimately, the safety comparator will be Roux-en-Y gastric bypass surgery.

Ketan Dhatariya, our diabetic ketoacidosis (DKA) guru, exposed a lack of in-depth knowledge of the subject in the audience that has no doubt prompted us all to read the recommended papers. Having produced a JBDS-IP evidence-based guideline for the management of DKA that has been adopted throughout the UK, he shared the results of a national audit. This showed a high rate of compliance with the guideline but a surprisingly high incidence of (usually mild) hypoglycaemia and hypokalaemia during the course of treatment. Although it seems likely that delays in setting up a glucose infusion and adding potassium to the intravenous fluid contribute to some cases, it is possible that the algorithm may need tweaking. If a higher concentration of potassium is required than previously thought, it will mean all patients with DKA being managed acutely in a level 2 high dependency facility, but the capacity for this is lacking. The selection of 3 mmol/L as the level of ketonaemia defining DKA was challenged as unjustifiably low. If raised to 4.4 mmol/L it would reduce the number of patients requiring the treatment protocol without obvious detriment.

The final session saw Bob Ryder mount a robust defence of pioglitazone as a treatment for type 2 diabetes. He showed data that called into question the assertion that pioglitazone causes bladder cancer, which has subsequently formed the basis for an ABCD position statement and a *BMJ* rapid response on the topic. He also revisited the ProACTIVE trial data in the light of cardiovascular outcome studies of newer agents. Will we soon be prescribing a combination of metformin, pioglitazone and empagliflozin? Watch this space.

See you in Brighton in November.

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Highlights from the 76th Scientific Sessions of the American Diabetes Association

Dr Caroline Day reports from the New Orleans meeting, June 10–14, 2016

Introduction

The Ernest N. Morial Convention Center beside the Mississippi in New Orleans was the venue for the 76th Annual Scientific Sessions of the American Diabetes Association (ADA). This easy-to-navigate venue was within walking distance of most of the conference hotels – making it an active choice between the real world experience of the hot, humid, hussle of the city streets and the cocooned isolation of an air conditioned shuttle bus. Taking the cool option may have been compensated to some extent by the 45 minute sessions on a Chair Workout, a Water Bottle Workout or Easy Office Exercises in the exhibition hall where there was a Wellness Lives Here® zone to increase awareness of this ADA initiative.

More than 16,000 delegates registered to attend this diabetes marathon, with corporate breakfast symposia starting at 5.30am, conference sessions running from 8.00am to 6.30pm, with professional interest group meetings at lunchtime and the industry sessions in the exhibition hall's Product Theatres, as well as corporate symposia in the evening. Whilst daily conference activities would easily supply your daily step target, more than 1,200 walkers and runners took part in the annual 5K@ADA. This year's winning time was 16.55 minutes achieved by Tommy Neal. It is also the fourth consecutive year that he has been the first person to complete the course.

Abstracts

The abstract book – showing acceptance of 2,549 abstracts – is an invaluable resource which fosters serendipity.[1] The book contains the meeting programme and summarises the oral presentation sessions (n=50) and moderated poster discussion sessions (n=59) so that it is easy to locate the abstracts which will be of interest. The text is sectioned into abstracts of oral presentations (n=378), poster presentations (n=2,021) and published-only abstracts (n=335), whilst noting where material has been withdrawn. Abstracts can also be accessed online, as can most of the posters.[2] Accessing the Scientific Sessions Itinerary Planner online[3] or by downloading the App (via Google Play or the App Store) also provides a convenient route to the abstracts. The late breaking abstracts (n=342) are also available in print[4] and online.[2]

Highlights

The symposia are a highlight of the ADA meeting and this year was no exception, with a programme incorporating 110 symposia providing comprehensive consideration of a range of specialist areas. Webcasts of presentations are available – for a fee – but access is free to ADA members who attended the meeting.[5] Corporate (satellite) symposia can also be accessed via this link.[5] The award lectures (Table 1) often provided insight into the circumstance and motivation which resulted in the advances described – inadvertently highlighting individualisation from a different perspective. Several of the award lectures – notably Barbara Kahn's Banting Lecture – are free to view online; time well spent.

The reporting of the liraglutide cardiovascular outcome trial LEADER (Liraglutide Effect and Action in Diabetes: Evaluation of Cardiovascular Outcome Results) provided the excitement for this year's meeting. The results of this study in patients at high cardiovascular risk reassuringly supported use of this glucagon-like peptide-1 receptor agonist. Liraglutide treatment reduced all-cause mortality (p=0.02) and cardiovascular death (p=0.007), as well as a non-significant decrease in non-fatal myocardial infarction, non-fatal stroke, hospitalisation for heart failure and pancreatitis.[6]

Table 1 Awards at ADA 2016

Award	Recipient*†
National Scientific & Health Care Achievement Awards	
Banting Medal for Scientific Achievement Award	Barbara B Kahn, USA*
Outstanding Scientific Achievement Award	Tamas L Horvath, USA*
Albert Renold Award	Gordon C Weir, USA
Outstanding Achievement in Clinical Diabetes Research Award	Steven E Kahn, USA
Outstanding Physician in Clinical Diabetes Research Award	Mayer B Davidson, USA
Outstanding Educator in Diabetes Award	Sheri R Colberg-Ochs, USA*
Harold Rifkin Award for Distinguished International Service in the Care of Diabetes	Yutaka Seino, Japan
Kelly West Award for Outstanding Achievement in Epidemiology	Edward W Gregg, USA*
Professional Interest Group Award Lectures	
Edwin Bierman Award (Complications)	Clay F Semenkovich, USA†
Norbert Freinkel Award (Pregnancy)	H David McIntyre, Australia†
Roger Pecorara Award (Foot care)	Nicolaas C Schaper, The Netherlands†
Richard R Rubin Award (Behavioural Medicine & Psychology)	Elizabeth Arquin Walker, USA
Association Officers Leadership and Service Recognition	
Charles H Best Medal	Robin J Richardson
Rachmiel Levine Medal	Margaret A Powers
Banting Medal	Desmond Schatz
Charles Kopke Medal	Lorrie Welker Liang

*†Lecture online: *free; †fee

Diary date

Next year's ADA will be held June 9–13 in San Diego, California where it should be warm (22°C/72°F) and dry, so pack your sunscreen.

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