ABCD Autumn Meeting 6-7 November 2014

Dr Andrew Macklin reports from London on the Autumn Conference of the Association of British Clinical Diabetologists

Introduction

It is always a pleasure to return to the Royal College of Physicians for the Autumn meeting of the ABCD. With Sir Denys Lasdun's architectural design deliberately avoiding the distraction of the view of Regents Park, there was nothing to divert attention from the superb programme.

The Rowan Hillson Insulin Safety Award

The meeting started on Thursday evening with the inaugural Rowan Hillson insulin safety award for the best insulin prescription chart, presented by Dr Hillson herself (Figure 1). This award was clearly a challenging one to judge. There were 41 entries in total, all showing substantial individual merit. The judges were kind enough to offer an insight into the challenges and their decision making in a poster presented at the meeting the following day. The winning entry was from Dr Jenny Clayton and colleagues at Nottingham University Hospitals NHS Trust.



Figure 1. Rowan Hillson (left) with the winners of the inaugural Insulin Safety Award, Jenny Clayton (centre) and Sonia Gilmore

Hard science

Friday's educational meeting started with Gary Thorpe reviewing the accuracy and precision standards of capillary blood glucose meters, which are actually calibrated to display plasma glucose concentrations. He outlined the factors that contribute to errors in measurement, the ISO standards meters should comply with, and what evidence to request from manufacturers in order to decide whether a meter is sufficiently accurate.

Common themes

Shanti Vijayaraghavan gave us a change of direction with her talk about improving diabetes services for young people in Newham. She described a young population of IT literate people wanting flexible and holistic care, and how offering access via non-traditional routes such as Skype had halved the DNA rate and improved HbA_{1c}.

This was followed by the second Niru Goenka lecture, delivered by Dulmini Kariyawasam (Guys & St Thomas'). She works in another deprived area of London, where the development of virtual clinics and care closer to home for appropriate cases has led to significant improvements in HbA_{1c}, admission rates and delivery of all nine care processes. It has also led to an increase in specialist input into complex diabetes.

Both the Newham and Guys & St Thomas' trusts co-designed their services for young people with the users themselves and both trusts have seen substantial increases in engagement with care after these services have been put in place.

The Guys & St Thomas' approach included a week long educational intervention for young people, covering topics including crisis management and basic carbohydrate counting, followed by a simulation suite session in which the people with diabetes took the role of the doctor seeing a patient (played by an actor) admitted to hospital due to non-compliance with diabetes medication. This simulation is a novel way of creating a sense of empowerment for the young people and letting them



Abbreviations and acronyms

ABCD	Association of British Clinical Diabetologists
DNA	did not attend
Expand	European Policy Action Network
	for Diabetes
HbA1c	glycated haemoglobin
IDF	International Diabetes
	Federation
REMOVAL	REducing With MetfOrmin
	Vascular Adverse Lesions in type
	1 diabetes

see the issues that their diabetes creates - from the other side of the doctor-patient relationship.

Big data and big systems

The next two talks focused on the structures of diabetes services, with Robert Madelin (@eurohumph) making his case for the use of "Big Data" and the concept that the patient be the owner of their own data. The issues of privacy, security and resilience of these data stores provoked lively discussion and highlighted how globally distributed these IT systems have become. He also identified a role for gamification¹ in health promotion, and in healthcare in general. An example of gamification in diabetes is "Monster Manor", an App for Apple and Android devices, developed by a collaboration of OCDEM, Sanofi and Diabetes UK.

The theme of "Thinking Big" was further developed in Adrian Sanders' presentation of his work in the All Party Parliamentary Group for diabetes, the ExPAND² and his presidency of the IDF Parliamentary Global Diabetes Network. He described the value of international parliamentary dialogue and the widespread signup to the Melbourne declaration, which calls for urgent action to address the global diabetes pandemic.³ Closer to home, the ExPAND group has developed a toolkit⁴ to brief politicians about the importance of diabetes (you may find this useful for less diabetes savvy managers too).



Figure 2. All six Chairmen of ABCD (left to right): Peter Winocour, John Wales, Rob Gregory (current Chair), Ken Shaw, Richard Greenwood & Chris Walton

Double trouble

We returned to clinical matters with the dry humour of David Goldsmith lightening the description of the terrible feedback cycle of deteriorating cardiac and renal disease. He outlined the limited effects of current treatments and the possible physiological areas from which new more effective drugs might come.

Steve Cleland then delivered another double whammy with his observations about insulin resistance in type 1 diabetes. He pointed out that cardiovascular disease is more associated with insulin resistance than HbA_{1c}, and that obesity in people with type 1 diabetes is rising, as it is for the rest of the population. He mentioned the REMOVAL trial⁵ in which the effect of metformin is being studied in people with type 1 diabetes.

Gut effects on diabetes

The REMOVAL trial will, no doubt, be of interest to Ewan Pearson, whose discussion about the future of targeted treatment

selection for diabetes focused on metformin metabolism and the genetics behind it. Genome wide association studies suggest a role for chromosome 11 and even hint at the genes involved. These provide a clue about the metabolic pathway through which metformin might affect cancer.

Genetics can contribute not only to our understanding of drug effects, but also to the mechanism of side effects. Gastrointestinal side effects limit metformin use in a significant number of patients and may be linked to inactivating mutations of organic acid transporters in the gut. Interestingly, this suggests that drugs which compete for these transporters might cause an increase in metformin-related side effects and there is some evidence to support this.

The final session of the day was an update on the ABCD sponsored Endobarrier® trial (REVISE-diabesity). This has not yet finished recruiting, but Piya Sen Gupta was able to share with us some preliminary data showing that inserting an Endobarrier when a patient has "failed" treatment with liraglutide leads to a substantial improvement in HbA_{1c}, body weight and liver fat content.

All together now

There was a hidden highlight to this meeting: all of the chairmen of ABCD, past and present, were attending and we were able to get them together in the Royal College of Physicians's medicinal garden for a photograph (Figure 2).

All good things come to an end

With the sun setting over Regent's Park it was time to thank the sponsors & close the meeting, with the promise of another excellent programme to come at the Spring meeting in Cardiff, 23rd and 24th April 2015. This will be held jointly with the Welsh Endocrine and Diabetes Society. I am promised that this will have a musical theme. It will certainly be covered live on Twitter, as was this meeting, by the official ABCD account (@ABCDiab).

References

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