



# Spring 2010 Meeting of the Association of British Clinical Diabetologists

Highlights of the Spring 2010 ABCD Meeting held in Hilton Newcastle Gateshead , 6–7 May 2010.

**Welcoming participants to the 27th ABCD meeting, Chair Dr Peter Winocour (Queen Elizabeth II Hospital, Welwyn Garden City) described the Gateshead venue, with its sweeping vista over the Tyne, as probably the most scenic venue for an ABCD meeting.**

ABCD wants to be fully engaged with the NHS Diabetes Research Network, Dr Winocour said, and members want to know more about its work. He introduced its Director, Professor Des Johnston, who described the new research environment in the NHS and the policy drivers behind it.

## **Fulfilling the research aspirations of the NHS**

Since 2003, health policy has recognised the value of clinical research for patient outcomes and the UK economy, Professor Johnston said, culminating in the 2006 Best Research for Best Health, which established the current strategy for R&D in the NHS and created the National Institute for Health Research (NIHR).

Clinical research networks and centres form the infrastructure through which the NIHR supports and facilitates research. Diabetes was among the topic-specific networks established to direct research to priority areas (see [www.ukdrn.org](http://www.ukdrn.org)). There are eight local diabetes research networks and diabetes specialty groups extend coverage throughout England. Local Research Networks provide resources to primary and secondary care, funding consultant and GP sessions, staff (research, managerial and administrative) and other costs (e.g. pharmacy).

Recent policy initiatives have reaffirmed the benefits of research for NHS patients. NHS providers will soon be required to include in their quality accounts the number

of patients recruited for clinical research, and strategic health authorities will state how they have supported NIHR and facilitated collaboration with the NHS.

## **A model of diabetic foot care in the community**

In the past 15 years the number of patients needing foot care has doubled but the number of podiatrists has not changed. The key to targeting resources to patients with greatest need, said Dr Graham Leese (*Ninewells Hospital, Dundee*), is to change the culture from foot examination to risk stratification, invest in education and training for podiatrists, rationalise antibiotic use, improve links between out-of-hours services and diabetic foot services, and develop consistent patient information.

In Scotland, the proportion of patients with recorded foot screening has increased from 25% to 55% and recent years have seen declining rates of ulceration and amputation. There is now funding for a National Co-ordinator for Diabetic Foot Services and a national plan envisages support for developing local foot networks, increasing foot screening to 75% and developing accredited training programmes for specialist skills.

## **National Diabetes Information Service**

The purpose of the National Diabetes Information Service (NDIS) is to make the information held by the NHS useful to the people who are running its diabetes services, explained its Clinical Lead, Dr Bob Young (*Salford*).

Via its portal (<http://ndis.ic.nhs.uk>), NDIS offers online analytical and reporting tools for health needs assessment, comparative performance analysis and health service activity. Examples of the type of

analysis possible include comparing diabetes complication rates between health economies, assessing local risk factors for complications and comparing the performance of primary care trusts. Reports now online include the Diabetes Patients Experience Project, the National Diabetes Audit and the Prescribing for Diabetes in England data. More on foot care, pregnancy and diabetes in children and young people are in development.

## **ABCD debate**

**‘This house believes that every obese male patient with type 2 diabetes should be screened for hypogonadism.’**

**For the motion.** Proposing the motion, Professor Hugh Jones (*Barnsley*) said the National Institute for Health and Clinical Excellence guideline on type 2 diabetes recommends annual review of erectile dysfunction in men with diabetes. Anyone who adheres to the guidance is screening for hypogonadism, he argued.

Erectile dysfunction is increasingly common with age in men with diabetes, and the prevalence of hypogonadism and low testosterone levels is significantly higher in these patients than in the general population. Low testosterone is associated with raised levels of cytokines, severity of atherosclerosis, modifiable cardiovascular risk factors and an increased risk of death.

International management guidelines recommend that men with diabetes who have erectile dysfunction should have their testosterone level measured. Testosterone replacement improves hypogonadal symptoms including erectile dysfunction, reduces body fat and improves insulin resistance and glycaemic control in men with type 2 diabetes.



**Against the motion.** The main argument against the motion is the lack of evidence for testosterone replacement from randomised clinical trials, said Dr Richard Quinton (*Newcastle*). The putative benefits of testosterone replacement are derived from observational studies and history has shown this is unreliable.

In the 1980s and 1990s, large observational studies provided apparently strong and consistent evidence that HRT reduced mortality in women. Only with randomised intervention trials did it become clear that HRT actually increased the risk of some cancers and cardiovascular events. We face a similar scenario with testosterone replacement therapy, Dr Quinton warned, and, given the fundamental lack of evidence for treatment, it is wrong to advocate screening for hypogonadism.

- Before the debate, the majority of the audience were against the motion, with eight for and three abstentions. Afterwards, the motion was overwhelmingly defeated but the number for the motion had increased to 11, with three still abstaining.

### Endocrine disorders

Aldosterone exerts multiple cardiovascular effects, said Professor John Connell (*Dundee*), outlining the role of the adrenal cortex as a cause of secondary hypertension. Summarising the management of primary aldosteronism, he said that imaging may identify an adrenal adenoma, for which surgery should be considered. Equivocal or normal imaging may indicate glucocorticoid-remediable disease, which can be confirmed by adrenal vein sampling. The options for treatment are unilateral adrenalectomy for adenoma or drug therapy, including glucocorticoids, aldosterone antagonists (eplerenone, spironolactone) and high-dose amiloride.

Describing the referral pathways for neuroendocrine tumours, Dr Andy James (*Newcastle*) said that carcinoid tumours are the most common presentation seen by endocrinologists. In Newcastle, the multidisciplinary Neuroendocrine

Tumour Service, supported by laboratory and radiology services, offers a multimodal approach to management that includes embolisation, surgery, systemic chemotherapy and radiotherapy. Somatostatin analogues relieve symptoms, reduce circulating hormones and stabilise tumour growth in more than half of patients. For the future, new PET ligands will be able to deliver substantial improvements in imaging and radiolabelled somatostatin analogues are expected to improve targeting of treatment.

### ABCD clinical audits

The ABCD nationwide audit of combined treatment with exenatide and insulin represents real-world clinical use and all its problems, said Dr Bob Ryder (*Birmingham*).

The audit findings on weight loss and glycaemic control have been announced at earlier meetings. Dr Ryder completed the presentation of the first analysis of the data by reviewing the use of exenatide and insulin in combination.

A total of 2257 patients (37%) were treated with the combination. Overall, it was considered safe and effective. Of 1584 patients who continued insulin after starting exenatide, 201 (12.7%) discontinued insulin, achieving significant weight loss (-10kg), but weight loss also occurred in patients continuing insulin.

Mean HbA<sub>1c</sub> fell by 0.81% but worsened in half of patients; risk factors were lower baseline HbA<sub>1c</sub> and greater three-month weight loss. This suggests that insulin should not be stopped when exenatide is initiated but tapered off in appropriate patients. Only one case of severe hypoglycaemia was reported.

Dr Gerry Rayman (*Ipswich*) presented data from the 2009 National Inpatient Audit Day, providing a snapshot of diabetes care of 14 259 patients in 219 UK hospitals. About one-third of patients were aged over 80 and more than a third used insulin. During their hospital stay, over a third of those taking insulin experienced a treatment error and one-quarter experienced more hyperglycaemia than usual. Fewer than one-third of patients could

recall having a foot inspection and about one in 30 develop a foot complication while in hospital.

The data show that we are not doing very well, Dr Rayman concluded. Although patients' experience of hospital was often not bad, about one-sixth described it in negative terms. This information should be used to benchmark services and negotiate service improvements, with re-audit to drive change.

### Understanding the curability of type 2 diabetes

Is the progression of type 2 diabetes inevitable?, asked Professor Roy Taylor (*Newcastle*). His research suggests a surprising answer.

Accumulation of fat in the liver is one of the earliest changes associated with type 2 diabetes, he explained. There is wide variation between individuals in the extent of intra-organ fat that precipitates type 2 diabetes but everyone with type 2 diabetes has excess liver fat.

Excess fat in liver and muscle inhibits the action of insulin, resulting in raised glucose production. Studies in patients undergoing severe calorie restriction show that marked weight loss is associated with normalisation of glycaemic control. However, this gain has been documented in the first four weeks after gastric bypass surgery – before weight change occurs – because sudden calorie restriction is associated with a rapid increase in insulin sensitivity.

A negative calorie balance will normalise plasma glucose at a rate proportional to the energy deficit. Professor Taylor's research has shown that a diet providing 600kcal/day reduces liver fat by 30% within seven days, with normalisation after six weeks. Fasting plasma glucose falls to within the normal range after one week and stabilises thereafter. These findings suggest that type 2 diabetes may be reversible, he said, though further work is needed to determine the implications of this research for clinical practice.

*Report by Steve Chaplin,  
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