Meetings Round-Up

Diabetes UK Annual Professional Conference 2004

The Diabetes UK Annual Conference was held in Birmingham (17–19 March 2004)

Parents and children underestimate overweight

Parents are not able to recognise obesity in their children, according to new research. A third of obese girls and half of obese boys were classified as being 'about right' by their parents, and 40% of parents expressed no concern about their obese child's weight.

In the study, which was conducted as part of the Earlybird Diabetes Study, parents also failed to recognise their own obesity. A third of mothers and half of fathers who were overweight or obese rated themselves as 'about right.' Half of overweight or obese children also underestimated their weight.

'People underestimating their BMI category and beginning to see overweight as the norm is a very worrying trend,' said Chief Executive at Diabetes UK, Benet Middleton. 'Being overweight can lead to numerous health problems including type 2 diabetes and it is essential that people realise if they have a weight problem. Obesity is a real problem and needs to be tackled now,' he added.

Higher mortality rates in people with type 1 diabetes

People with type 1 diabetes have a mortality rate across their lifetime of three and a half times that of those in the general population.

Researchers from University College London and the University of Surrey used the General Practice Research Database (GPRD) to work out the mortality rates in men and women with type 1 diabetes.

'The risk of death from type 1 diabetes increases with age. It it caused by the long-term complications of diabetes which include heart disease, stroke and kidney failure. These, and other complications such as blindness and amputation, can all occur when the condition is not managed properly,' said Eleanor Kennedy, Research Director at Diabetes UK.

According to one of the researchers, Sabita Soedamah-Muthu (UCL), the key is to increase life expectancy 'through managing blood glucose levels and blood pressure levels, and through good standards of diabetes care.'

Diabetic ketoacidosis mortality remains significant

Despite the widely held view that the incidence of diabetic ketoacidosis (DKA) has fallen, mortality rates remain significant. This was the key message from Malcolm Natrass who delivered the Arnold Bloom Lecture at this year's Diabetes UK conference.

Natrass (Birmingham) started his lecture with a historical look at mortality from DKA, explaining how inconsistencies in counting mortality could confound the results. According to Natrass, treatment of DKA has been an 'educational failure.'

'The primary object of treatment is to give insulin, and not to lower blood glucose,' said Natrass. 'The sliding scale approach to giving insulin cuts down the amount of insulin given when it is still needed.'

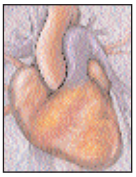
Obesity reduces life expectancy in people with diabetes

Life expectancy could be reduced by up to 8 years in people with type 2 diabetes who are overweight. People with type 2 diabetes already have a reduced life expectancy compared with the general population. This research shows that a high BMI is a leading cause of premature death in people with diabetes.

The research team from the University of Surrey, the Royal Free Hospital, and University College London analysed data from over 44 000 people with type 2 diabetes.

'Eighty percent of people are overweight when they are diagnosed with type 2 diabetes so this research is very worrying. It is essential that people with diabetes manage their weight so that they can help reduce their risk of serious complications,' said Brent Middleton, Chief Executive, Diabetes UK.

UKPDS outcomes 5 years on



Rury Holman, Oxford, presented outcomes of the UKPDS 5 years on at this year's Diabetes UK conference.

Post-study monitoring of the UKPDS took place between 1997 and 2002, and patients will be followed up until 2007. At 2 years, mean systolic blood pressure rose in those previously randomised to tight blood pressure control. Mean systolic blood pressure and diastolic blood pressure were indistinguishable between the groups and improved overall. At 5 years, the risk reduction seen in people randomised to tight blood pressure control had diminished.

Key messages were that the majority of patients with type 2 diabetes are or will become hypertensive. Blood pressure is an independent continuous risk factor for cardiovascular disease, and effective therapy often requires three or more antihypertensive agents. 'We should treat to targets,' said Holman. 'Benefits will diminish if treatment is not maintained,' he concluded.

Key role of nurses in delivering new GMS contract

Nearly a quarter of patients with poorly controlled type 2 diabetes reached the GMS contract target blood glucose level when they were referred to a diabetes nurse facilitator (DNF). Patients reached the target of $HbA_{1c} < 7.5\%$ without needing to start on insulin.

In the study, a DNF from the Elsie Bertram Diabetes Centre (Norfolk and Norwich University Hospital) worked with 12 GP practices across three PCTs. Support was provided via educational programmes and, where appropriate, insulin therapy.

In 1 year, 141 people were referred with poorly controlled type 2 diabetes. A third of this group were converted to insulin. The mean HbA_{1c} of the group who were not managed on insulin was reduced from 9.3% to 8.3%, and in a quarter to <7.5% after 12 months with just education, medication and dietary review.

'This is a real example of primary and secondary care working together to deliver improvements for patients,' said Mark Sampson, one of the investigators. 'Under the new GP contract this pattern of service could help generate extra resources to make further investment in improving primary care diabetes services,' he added.

New developments in neuropathy and retinopathy

Solomon Tesfaye, Sheffield, talked about new interventions for painful diabetic neuropathy. He highlighted the importance of starting with near normoglycaemia and that tricyclic compounds should be considered first-line drugs. 'Cardiovascular risk factors are related to diabetic neuropathy, and painful diabetic neuropathy is difficult to treat,' said Tesfaye. 'There have been developments in surrogate markers for neuropathy, and we know that the central nervous system is involved in neuropathy. This knowledge may lead to promising interventions in neuropathy, and the results of clinical trials are awaited.

Simon Harding, Liverpool, and Graham Leese, Dundee, covered advances in treatments for retinopathy. 'Future therapies may be based on angiotensin converting enzyme inhibitors/angiotensin receptor blockers or protein kinase C inhibitors, octreotide, intraocular steroids and statins,' said Leese. His talk focused on screening intervals and Leese postulated that in years to come 'we may not screen everyone annually.'

According to Harding, 'we need to focus on macular oedema.' He said that there is a long way to go in local treatments.

BP lowering drugs: future therapies

Bryan Williams, Leicester, dispelled some of the myths and misconceptions surrounding treatment of high blood pressure. These myths include the belief that lowering blood pressure can be dangerous, β-blockers should be avoided due to masking of hypoglycaemia, and that calcium channel blockers are dangerous.

Williams gave an overview of the different drug treatments available and concluded that: 'Monotherapy is ineffective – patients require combination therapy that should include renin-angiotensin system blockade and a thiazide diuretic.'

Hope for type 1 diabetes cure

New findings suggest that it may be possible to switch on insulin and glucagon genes in human embryonic stem cells. These genes are normally only switched on in islet cells.

'This is very exciting research,' said Eleanor Kennedy (Research Director, Diabetes UK). 'It gives a strong indication that stem cells may hold the promise of a cure for type 1 diabetes. We will be watching progress in this area closely.'

However, this is only the first step in therapy and the next challenge for the researchers from King's College, London, is to recreate the body's natural responses, i.e. the release of insulin and glucagon in response to blood glucose levels.

Weight management information pack for primary care

A weight management information pack produced by Diabetes UK for practice nurses and GPs has been distributed to almost 12 000 GP practices. The pack, which is supported by Cambridge Health and Weight Plan (CHWP) seeks to help healthcare professionals tackle the problem of weight management in people with diabetes.

According to Peggy Bennett, CHWP's NHS Development Manager, there has been a pleasing response to the pack. 'It is heartening to know that the pack has had such an impact and that it has already become an invaluable resource in the fight against diabetes.'

Last year, CHWP in association with Diabetes UK produced an 'at risk' leaflet to help patients and CHWP counsellors work out their risk of developing diabetes based on factors such as, age and ethnicity, weight, waist size and family connections.

Developments in diabetes care and future advances

There have been substantial changes in diabetes care since the 1960s and the focus of care has shifted from the hospital to the community. This was the subject of this year's Mary MacKinnon lecture, which was delivered by Roger Gadsby, GP, Nuneaton. Consultations have also become more patient centred and less doctor led.

Dr Gadsby highlighted the changes that have occurred in diabetes care by drawing on the life and work of John Malins who prophesised in 1968 that 'most work [in diabetes] could be carried out by the GP.'

Dr Gadsby then looked to the future and made some prophecies of his own. 'Empowerment will clearly be a major theme, and the new GMS contract will provide GPs with incentives to deliver high quality care.' Gadsby's predictions for the future are: the continued development of diabetes care at the practice level and the development of the practice nurse assistant role. Practices will provide all routine care, screening for and diagnosis of diabetes, and initial and ongoing care, including reviewing people with at risk feet, paediatric and adolescent care, and review of people with coronary heart disease risk factors,' said Gadsby. 'Hospitals will do acute care including acute foot problems and laser treatment,' he added.