

Diabetes UK Professional Conference 2013 13–15 March 2013, Manchester, UK

Hypoglycaemia is not fully understood by patients

Results from an MSD-funded survey of 1012 patients treated with a sulphonylurea show that over one third of patients (38%) do not understand hypoglycaemia and other common side effects of their treatment, often blurring the distinction between side effects and diabetes-related complications.

The data showed that only 36% of respondents could confidently identify the symptoms of a mild hypoglycaemic episode, with 24% able to recognise the onset of a severe episode.

Tony Barnett, Emeritus Professor of Medicine and Consultant Physician, University of Birmingham and Heart of England NHS Foundation Trust and study co-author, commented: "There is an urgent need for more proactive discussions between healthcare professionals and patients – better and clearer communication will help identify the risk, and hopefully reduce the occurrence of this manageable treatment complication."

Better healthcare is needed to prevent young people with T1D dying

Diabetes UK has published new guidelines to address the increased risk of death encountered by young people with T1D because of poor healthcare availability.

The organisation has warned that young people do not receive sufficient healthcare to properly manage their condition, leaving young women nine times more likely to die and young men four times more likely.

"Type 1 essentials for children and young people" outlines 10 healthcare steps that encourage better management of T1D in youth, aiming to prevent the onset of complications in later life.

The artificial pancreas: An update

Results from the largest closed-loop study to date suggest that the Cambridge closed-loop algorithm (CAM) performs significantly differently in manual control centres (MCC) compared to automated control centres (ACC).

The randomised three-way cross-over study analysed data from 23 hours of day and night insulin delivery in 47 patients with T1D across six European centres.

Blood glucose was controlled by CAM and International Artificial Pancreas algorithm or pump therapy, with insulin being delivered automatically every 5 minutes in the ACC group and manually every 15

minutes in the MCC group

It was found that time in target, time above target and mean glucose were significantly better in MCC, although glucose control was comparable in both MCC and ACC.

Dr Roman Horvorka, Principal Research Associate at the Department of Paediatrics, University of Cambridge Metabolic Research Laboratories and NIHR Cambridge biomedical Research Centre said: "Closed-loop systems are the only option for qualitative improvement of diabetes care in the young. I believe that we are at the start of new ways and paradigms of better diabetes management."

Lower limb amputation is more likely in white men from disadvantaged areas

Researchers have identified white men living in disadvantaged areas as the group with the highest risk of diabetes-related amputations.

The results, based on data from the National Diabetes Audit of 1.8 million people, coincides with the launch of the "Putting feet first" campaign by Diabetes UK, which aims to significantly reduce diabetes-related amputations by raising awareness of the importance of good foot care and transforming the foot care services available to people with diabetes.

While it has already been established that people with diabetes are up to 30

times more likely to require a lower limb amputation than the general population, these results suggest that efforts for prevention should specifically target white men, particularly as previous research has shown that men in this group are more reluctant to utilise healthcare services. Shockingly, up to 80% of diabetes-related amputations are thought to be preventable. Barbara Young, Chief Executive for Diabetes UK, said, "Certainly, the fact that they are more likely to have an amputation suggests that even more amputations in this group could be prevented than in the rest of the population."

Many women with gestational diabetes do not receive appropriate postnatal care

A study from the University of Surrey found that only 13% of women affected by gestational diabetes receive adequate postnatal care.

The study retrospectively analysed electronic health records from approximately 800 patients registered with GPs across England. The data showed that 102 (13%) women received at least one glucose blood test after delivery in accordance with the national guidelines. Of the 102 women that received blood tests, 2% had already developed T2D, with 8% showing glucose levels outside the normal range, and 6% displaying clinical markers of prediabetes.

Simon O'Neil, Director of Health Intelligence and Professional Liaison at Diabetes UK, said: "Tests should be offered as a matter of course and new mothers with gestational diabetes should feel comfortable asking their doctor for follow-up checks. It is only by doing this that we can give mothers who have had gestational diabetes the best possible chance of not going on to develop T2D."

Proposals for a gestational diabetes recall register and annual computer alerts for physicians were suggested to assist with the recall of patients.



Image attributed to: Stephen Richards

Older people may benefit from treatment with dipeptidyl peptidase-4 inhibitors

New analyses of data by healthcare company MSD have shown that DPP-4 inhibitors are effective in improving glycaemic control in older people with T2D compared to a range of alternative treatments.

The observational study compared data from 129 people with T2D who were treated with DPP-4 inhibitors sitagliptin (74.3%), vildagliptin (28.1%) or saxagliptin (3.9%) versus a control group who had no previous treatment with DPP-4 inhibitors.

Over a period of 12 months, there were fewer episodes of hypoglycaemia in the cohort receiving DPP4 inhibitors compared to the

control group (3% versus 8%, $P=0.062$) with no patients requiring hospitalisation.

Alan Sinclair, Professor of Medicine at the University of Bedfordshire, commented: "These data suggest that older at-risk patients may well benefit from improved glycaemic control and a lesser risk of hypoglycaemia if treated with a DPP-4 inhibitor, but many are not prescribed these therapies. There is a real need for open conversations between primary care professionals and this patient population to reduce their risk of hypoglycaemia and improve their T2D management."

RD Lawrence: A pioneer of stratified medicine

A series of lectures was dedicated to the co-founder of Diabetes UK, Dr Robert Daniel Lawrence (1892–1968), and his impact on the discovery of insulin therapy.

After being diagnosed with diabetes by chance in 1920 (he did not show classical symptoms and was diagnosed when admitted for a severe eye infection), Dr Lawrence dedicated his life to the treatment and education of people with diabetes.

Dr Lawrence was a pioneer of insulin therapy and strongly encouraged stratified medicine in clinical practice, which aims to identify subgroups of patients and optimise their treatment according to their physiology, such as drug response, and clinical phenotype, such as age or BMI.

Dr Ewan Pearson, Clinical Reader at the University of Dundee and Honorary Consultant at Ninewells Hospital and Medical School, speaker at the RD Lawrence session said: "Go forth and stratify."