ADA from home!

This year, over 12 500 people participated in the 80th Scientific Sessions of the American Diabetes Association – all from their screens. To complement the Journal's coverage of some of the most important news from the meeting (https://bit.ly/2VH3Hye), Nicola Milne provides her highlights, placing an emphasis on the practical messages for primary care practice.

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In a conference presenting and analysing emerging trial and real-world evidence relating to newer technologies and therapies, including the potential for a weekly basal insulin (icodec; Rosenstock et al, 2020), there was an interesting debate around the place of one of our oldest classes of medications from the 1950s – the sulfonylureas (SUs).

Both debaters, Professor Sophia Zoungas and Professor Carol Wysham, acknowledged the enhanced benefits of the newer therapies, including weight loss and cardio-renal protection, and, indeed, their wider evidence base. The negatives relating to SUs were highlighted as the potential for weight gain, hypoglycaemia risk and controversy around their cardiovascular safety. However, data presented from observational studies suggest that the incidence of severe hypoglycaemia is lower in people taking SUs than in people taking insulin and weight gain with SUs has been relatively modest in large cohort studies. A comparison of SUs and pioglitazone in the TOSCA.IT (Thiazolidinediones Or Sulfonylureas Cardiovascular Accidents Intervention Trial) study confirmed the efficacy and cardiovascular safety of SUs (Vaccaro et al, 2017).

In a strong case in support of the SUs, the audience were reminded of the management of neonatal diabetes and maturity onset diabetes of the young (MODY), where they would be the preferred first-line medication. Steroid-induced hyperglycaemia and those confirmed as type 2 diabetes presenting with osmotic symptoms were also used as good examples of where SUs would give benefit in terms of their efficacy in lowering blood glucose levels and providing symptom relief in a timely manner.

Significantly, although a debate, both presenters and the session chair concurred that we must consider that 80% of people with diabetes live in low- and middle-income countries, so the affordability of SUs is a particularly important consideration in support of their use and, indeed, may become increasingly relevant following the financial impact of COVID-19 on health economies across the globe.

Pioglitazone

Another "older" therapy came in for much discussion during *Tailoring treatment options based on diabetes comorbidities*. Pioglitazone use was reviewed in the presentation on non-alcoholic fatty liver disease (NAFLD) and non-alcoholic steatohepatitis (NASH), and in the presentations on stroke.

NAFLD/NASH

The audience was encouraged to view NASH as a frequent and serious complication of type 2 diabetes and to be proactive in the early identification of people at risk for liver fibrosis. Pioglitazone was the recommended treatment option in effecting a reduction in liver fibrosis, although advocated at lower doses of 15–30 mg daily to help offset any potential weight gain. The link with NASH and increased cardiovascular risk was highlighted, with a reminder of the importance of cardiovascular disease risk reduction, including statin therapy (which is not usually contraindicated unless liver blood tests are significantly elevated; Bril and Cusi, 2017).

Stroke

A third of people who have a stoke have diabetes. Antidiabetes drugs with proven benefit post stroke include some GLP-1 receptor

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agonists while, in the IRIS (Insulin Resistance Intervention after Stroke) study, pioglitazone showed clinical benefit in reducing the risk of myocardial infarction and further stroke in people with previous stroke and transient ischaemic attack (TIA; Kernan et al, 2016). The potential for increased fracture risk with pioglitazone was highlighted along with the concern that in people with heart failure it can cause harm. There was a call for more research into the use of lower doses of pioglitazone (down to 7.5 mg daily) and the use of risk assessment to identify people with greatest absolute benefit and lower fracture risk. The SGLT2 inhibitor and DPP-4 inhibitor classes were highlighted as having no additional benefit within this cohort beyond their potential glucose-lowering properties.

More research is being conducted into the effects of pioglitazone within NAFLD/NASH and stoke, particularly around the use of low doses. This may be an interesting space to watch.

Hard-to-reach groups

Reaching the hard to reach looked at how we can achieve improved engagement and care in typically hard-to-reach groups. Case studies and the words of people with diabetes were used to illustrate the complexities of coping with the challenges of how to balance diabetes and life. The audience was reminded of working in partnership with people with diabetes and the high value of working within multidisciplinary teams to provide holistic care to meet all needs.

Three specific groups were discussed. Those transitioning to adult services talked of desiring two-way conversations, of being seen as a whole person and that a seeming lack of diabetes self-management might not be due to negligence but to other competing demands. People post-organ transplant advocated the involvement of pharmacists, social workers, dietitians, social prescribers and psychologists as important in their recovery journeys. This was echoed by the group of people post-amputation. The need for a positive focus on quality of life was another underlying theme from both people with diabetes and their families.

Outstanding Educator Lecture

In his Outstanding Educator in Diabetes Award Lecture, there were some excellent take-home messages from William Polonsky (President and Founder of the Behavioral Diabetes Institute) as he called for all diabetes educators to "refuse to be boring". He highlighted that over 400 research trials into the benefits of diabetes education show that, especially in group situations, it is effective in significantly improving HbA_{1c}, body weight, waist circumference, triglycerides and diabetes knowledge. However, few people are referred, few people show up and, if they do show up, most drop out.

It is his belief that healthcare professionals (HCPs) can feel pressured into trying to deliver too much information, may be fearful that too many interactions with participants will make it impossible to deliver the required content, or be fearful of being unable to answer questions. While it may be painful to reduce content, addressing participants' concerns about their medications is more important than explaining how each class of medication works. Diabetes education needs to be personally meaningful.

Professor Polonsky ended by reminding delegates that we must remember that "education is not the filling of a pail, but the lighting of a fire."

Female sexual dysfunction

An under-represented subject in diabetes care was addressed in *Female sexual dysfunction in diabetes*. Female sexual dysfunction (FSD) is relatively common, affecting 35–71% of women with type 1 diabetes and 69% of women with type 2 diabetes aged 18 to 70 years. Causes in diabetes include atherosclerosis leading to reduced circulation; neuropathy leading to reduced sensation; high glucose levels contributing to reduced lubrication and possible mycotic infections; body image; fear of hypoglycaemia; depression; anxiety and side effects of medications.

72% of women with FSD would like to talk to their HCP about their difficulties, but 73% of these women would like their HCP to initiate the conversation. HCPs, however, often feel that they lack the knowledge and skills to embark on such conversations (Kingsberg et al, 2019). A

useful screening tool and management pathway is included in the document *The International Society for the Study of Women's Sexual Health Process of Care for Management of Hypoactive Sexual Desire Disorder in Women* (Clayton et al, 2018; https://mayocl.in/3glx94W).

The "legacy effect"

During *The "legacy effect" in diabetes – are there long-term benefits of short-term tight glycaemic management?*, Professor Rury Holman from the University of Oxford summarised the key take-home messages from his presentation on the legacy effect in type 2 diabetes.

He emphasised that glycaemia should be managed proactively to prevent it increasing over time, rather than using a reactive "rescue therapy" approach, reminding delegates that this is a major challenge as progressive hyperglycaemia is a characteristic feature of type 2 diabetes, and declining beta-cell functioning must be anticipated. The type 2 diabetes "legacy effect" and type 1 diabetes "metabolic memory" effect probably reflect the complex biochemical end-organ impact of hyperglycaemia and the timescale over which these changes occur, although epigenetic changes may also play a role. As HCPs, we need to be mindful that it is unlikely that waiting until some years after diagnosis of type 2 diabetes to minimise glycaemia can ever fully recapture the benefits of intervening immediately. ■

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