

# Case-based learning benefits practice

Reviewing recent consultations to identify interesting cases to discuss at the Primary Care Academy of Diabetes Specialists (PCADS) made me realise just how complex the people with diabetes we look after really are these days. Each person I reviewed presented challenging decisions on targets and treatments, even for a veteran GP such as myself with 35 years' experience. Each person is different, often people do not really fit the guidelines, and each one deserves to be treated as an individual, making our consultations complex. Sharing the scenarios with medical students gave them the opportunity to apply their theoretical knowledge of diabetes to real-life cases. It was an experience they found useful and that I hope will help prepare them for future exams.

## A new diagnosis with CV risk factors

The first case we discussed was a seemingly straightforward, "bread and butter" case of how to manage a 60-year-old female smoker with a new diagnosis of diabetes. This case was challenging because her lifestyle, weight, blood pressure, lipids and glycaemic control were all suboptimal and these issues were combined with high stress levels made worse by her new diagnosis and a demanding career.

What should we help her tackle first? Should we aim for multifactorial risk factor management immediately? Should we formalise her cardiovascular risk by using a risk calculator or assume that she is at high risk and encourage her to start a statin? Will sharing a 10-year or lifetime cardiovascular risk score with her have the greatest impact and how can we help her better understand her score? Is a 40% reduction in non-HDL cholesterol important to calculate and aim for? How low should we go with blood pressure control? What does the evidence base tell us about how best to help her stop smoking and how can we motivate this woman

to want to change her potentially harmful lifestyle habits?

How we speak to people – particularly in this first conversation – is crucial. This was highlighted by [Naresh Kanumilli](#) in a previous issue of the Journal. In this issue, [Jen Bateman](#) helps us understand the grief cycle, how it relates to a new diabetes diagnosis, and how we can best help this woman to cope with her thoughts and feelings.

## Steroid-induced diabetes

A more complex case of a frail older woman with newly-diagnosed steroid-induced diabetes, autoimmune hepatitis and cirrhosis encouraged wide-ranging discussion, including how to diagnose steroid-induced diabetes and how to manage hyperglycaemia safely in people with significant liver disease (whether related to non-alcoholic fatty liver disease or unrelated, as in this case). It also acted as a reminder to ensure that we are monitoring for diabetes in those on high-dose or long-term oral steroids. This is an important topic deserving of consideration and discussion. In this issue, David Morris follows up his recent article on the [mechanisms and risks](#) of steroid-induced diabetes and hyperglycaemia with guidance on how to [manage these conditions](#).

## Applying theory to real case studies

At PCADS, we explored a stepwise structure for the way in which we might deconstruct and manage complex multimorbidity. The proposed steps included:

- Identifying the parameters to be managed (in the first case study, these are stress, lifestyle, glycaemia, blood pressure and lipids).
- Identifying and sharing options for achieving these.
- Agreeing individual goals for each aspect of care.
- Helping motivate the person to implement their individualised plan.



**Pam Brown**  
GP in Swansea

**Citation:** Brown P (2018) Case-based learning benefits practice. *Diabetes & Primary Care* 20: 165–7

***“On a difficult day, we owe it to ourselves to stop and review one of our success stories.”***

This may require several consultations and we discussed the importance of patience and of giving the person time to understand the significance of making changes and taking medication.

I hope the students learnt how challenging and interesting life is in primary care and how intensely rewarding it can be when the management plan comes together and we can see real change happen. Perhaps it will even motivate them to choose a career in primary care. On a difficult day, when our diabetes consultations feel filled with challenges, we owe it to ourselves to stop and review one of our success stories, and to reflect on what went well and our role in helping that happen. Hopefully, this will rekindle our enthusiasm and make everything feel more achievable.

### **An opportunity to debate and share expertise**

All of us who attended the PCADS meeting, both PCDS faculty and GPs with a special interest (GPwSI) in diabetes from around the UK, enjoyed the opportunity to debate and discuss challenges in our day-to-day delivery of diabetes care. My co-presenters were excellent and I am grateful to those who agreed to share their expertise with us by writing for the Journal. Upcoming topics include type 2 diabetes in adolescents and young adults, how to identify and manage people for bariatric surgery and how to de-prescribe in diabetes. Kevin Fernando begins with [Practice pearls and hot topics](#) in diabetic retinopathy in this issue.

If you are a GP with a special interest in diabetes and would like to be involved in PCADS, please email [info@omniamed.com](mailto:info@omniamed.com) and we will keep you up to date with details of the 2019 event and any research the group undertakes in the meantime.

### **EASD conference and breaking news**

Primary Care Diabetes Europe (PCDE) hosted a symposium at the European Association for the Study of Diabetes (EASD) in Berlin last month focusing on the management of

both younger and older people with type 2 diabetes. Sam Seidu reminded us that we manage many aspects of diabetes care less well in younger people with type 2 diabetes, despite them being at high risk of complications including mortality from cardiovascular disease. Professor Kamlesh Khunti reminded us that clinical inertia includes not just failure to escalate treatment when needed, but also failure to de-intensify if it is appropriate, as it often is in our frail older patients. This thought-provoking symposium encouraged me to review and reflect on these two populations in my own practice, and to identify the dangers of over-treating frail older people and those with long-standing type 2 diabetes as well as considering the longer-term consequences of under-treating newly-diagnosed and younger people.

In our [EASD conference report](#) we share the key messages for primary care from the PCDE symposium and from the UKPDS at 40 session, including a further reminder of the legacy effect of achieving tight glycaemic control early in the course of the disease. [Alan Sinclair](#) revisits the topic of older people with diabetes, encouraging us to look at those living in care homes and consider how our treatment of their diabetes may have a significant impact on their quality of life.

This year's EASD conference showcased the launch of the 2018 American Diabetes Association/EASD consensus statement on glycaemic management, which moves away from a “one size fits all” approach with a menu of drug options as add-on to metformin. Instead, it encourages clinicians to divide the population by comorbidities and compelling needs. We are encouraged to identify those with cardiovascular disease or chronic kidney disease and treat them with a sodium–glucose cotransporter 2 (SGLT2) inhibitor or glucagon-like peptide-1 (GLP-1) receptor agonist with proven cardiovascular or renal benefits. The remainder of the population are divided into those where avoidance of weight gain is important, those where hypoglycaemia must

be avoided, and those where cost of treatment is an over-riding factor. There are treatment recommendations for each group.

Several important studies were presented at the EASD and simultaneously published in the journals. We share these in our [news pages](#). There has been much discussion about whether the cardiovascular and renal benefits seen with empagliflozin in EMPAREG OUTCOME (Zinman et al, 2015) and canagliflozin in the CANVAS programme (Neal et al, 2017) reflect a class effect. The presentation and publication of DECLARE-TIMI (Dapagliflozin Effect on Cardiovascular Events) in early November confirms the cardiovascular safety of dapagliflozin (Wiviott et al, 2018). Dapagliflozin treatment lowered the rate of the composite of cardiovascular death and hospitalisation for heart failure compared to placebo, but had no significant impact on the primary endpoint of major adverse cardiovascular events. Two thirds of the population had no pre-existing cardiovascular disease and this may have influenced the outcome. You can read more about this important trial in the news pages.

The new American Diabetes Association/EASD consensus will result in the increased initiation of SGLT2 inhibitors – possibly for the first time in some practices. There is a lot of information available on when and how to use these drugs safely, particularly in a recent paper authored by several PCDS members (Wilding et al, 2018). As a service to busy readers, we have combined all of the important information into [How to use SGLT2 inhibitors safely](#), part of our practical and popular series to guide our practice. We hope this, and the timely [How to diagnose and manage testosterone deficiency](#) by Mike Kirby, also in this issue, will help keep our patients safe while allowing us to deliver best practice and up-to-date management.

### State of the Nations report

A few months ago, while discussing the similarities and differences in diabetes care

delivery across England, Northern Ireland, Scotland and Wales, the PCDS Steering Committee agreed that we needed more than anecdotal information about the aspirations, challenges and educational gaps faced by our members and the wider primary and community care teams delivering diabetes care across the UK. *The State of the Nations* survey rapidly took shape and we would like to issue a huge thank you to all of you who kindly participated. In this issue, we include the [top-line findings](#) from the survey and a commentary on the results from each of the four nations. This important report will be presented to the UK Government later this year and, on publication, will be available on the [PCDS website](#).

### A time for reflection

Jane Diggle and I hope we have given you lots to reflect upon in this issue. We are looking forward to sharing highlights of the very successful 11<sup>th</sup> Scottish Conference of the PCDS in our next issue, and to discussions this month with our editorial board, who always produce a wealth of new ideas for journal content and ways to inspire us all to deliver even better diabetes care. I hope to meet many of you at PCDS Annual Conference later this month. ■

Neal B, Perkovic V, Mahaffey KW et al (2017) Canagliflozin and cardiovascular and renal events in type 2 diabetes. *N Engl J Med* 377: 644–57

Wilding J, Fernando K, Milne N et al (2018) SGLT2 inhibitors in type 2 diabetes management: key evidence and implications for clinical practice. *Diabetes Therapy* 9: 1757–73

Wiviott SD, Raz I, Bonaca MP et al (2018) Dapagliflozin and cardiovascular outcomes in type 2 diabetes. *N Engl J Med*, <https://www.nejm.org/doi/full/10.1056/NEJMoa1812389>

Zinman B, Wanner C, Lachin JM et al (2015) Empagliflozin, cardiovascular outcomes, and mortality in type 2 diabetes. *N Engl J Med* 373: 2117–28

**“There is a lot of information available on when and how to use SGLT2 inhibitors safely.”**