

### Rowan Hillson Insulin Safety Award 2016 announced

(Rob Gregory and Mike Sampson) The topic for the 2016 award is the 'best joint pharmacy and diabetes team initiative to improve insulin and prescribing safety in hospital'. The judging criteria are defined by the Safe Insulin Prescribing Group (Umesh Dashora, Debbie Stanisstreet and Erwin Castro) on behalf of the Joint British Diabetes Societies. The submissions will be scored by an independent panel chaired by Rowan Hillson, and the winner will be awarded the prestigious annual Rowan Hillson Insulin Safety Award at the ABCD Spring 2017 meeting. The outcome of this initiative will be published on the ABCD. Diabetes UK and DISNUK Group websites to share excellent practice. This competition follows the very successful 2014 competition to find the best insulin prescription chart (http://www.diabetologistsabcd.org.uk/JBDS/insulin\_chart\_winners.pdf) and 2015 competition for the best hypoglycaemia avoidance initiative. Competitive applications are likely to be those that show hard evidence of benefit, that are translatable to other Trusts, are costed, are relatively simple and sustainable, and which have been commissioned or supported by an Acute Trust. This competition is open to all healthcare professionals and the closing date is 31 January 2017.

http://www.diabetologists-abcd.org.uk/Documents/ JBDS\_RH\_insulin\_safety\_competition\_2016\_entry\_form.docx

### One year results of endobarrier study presented

### (Bob Ryder)

On 22 April 2016 the 1 year results of ABCD's REVISE-Diabesity research study of endobarrier treatment for diabetes and obesity were presented at the ABCD Spring meeting in Manchester. The group receiving endobarrier and liraglutide reduced HbA<sub>1c</sub> by 22.8 mmol/mol and weight by 12.4 kg.

The news item is now on the YouTube channel at: https://youtu.be/xRcnMBOdb58

The slides from the presentation made in Manchester can be viewed by ABCD members at: http://www.diabetologists-abcd.org.uk/general\_member/Presentations% 20Spring%202016/RyderSenGuptaMcGowan.pdf

# ABCD position statement on pioglitazone exposure and the risk of bladder cancer

### (Alison Gallagher)

The possible link between pioglitazone exposure and the risk of bladder cancer has been contentious for a number of years. ABCD has now responded to the recent *BMJ* paper on the use of pioglitazone and bladder cancer risk. The evidence is reassuring about pioglitazone safety and ABCD calls for NICE to review their advice on pioglitazone and bladder cancer risk. For the ABCD response see http://www.bmj.com/content/352/bmj.i1541/rapid-responses

# New education resource for healthcare professionals

(Kath Higgins and Sowmya Gururaj) Several initiatives have been set up to help doctors at the University Hospital of Leicester NHS Trust improve their understanding and knowledge about diabetes management and insulin safety in hospital. Inpatient Diabetes Education through Animation (IDEA) involves short cartoons based on real life. This educational tool may be used to disseminate key learning messages to all healthcare professionals who care for patients who have diabetes and are admitted to hospital. The videos focus on key areas where mistakes have been made to learn from these experiences, improving care and patient experience. The animations can be found on: YouTube: https://goo.gl/SD56kY Vimeo: https://vimeo.com/album/3947654

# ABCD position statement on type 1 diabetes

#### (Rob Gregory and Patrick Sharp)

The Association continues to champion the cause of best care for people with type 1 diabetes. Work is ongoing to ensure that the distinct needs of this group are recognised within the modern commissioning landscape. This document outlines the basics of care which would be expected for those with type 1 diabetes.

http://www.diabetologists-abcd.org.uk/Position\_Papers/ Type\_1\_standards\_of\_care.pdf

## NHS England publication on diabetes treatment

In a recent publication, NHS England has provided guidance on what to aim for while treating people with diabetes and how to achieve those aims. The document sets 2020 goals as achievement of combined glucose. BP and cholesterol targets in at least 40% of the patients, access to diabetic foot MDTs and inpatient diabetes teams, reduction in micro and macrovascular complications and increased participation in national diabetes audit. The publication also advocates close working of NDA teams and CCGs to reduce variations in achieving the above targets, CCGs to understand action needed to be taken, to improve compliance with NICE, to increase adherence to treatment pathways, to develop foot care pathway, to support integrated care, to encourage specialist input into primary care and to maintain inpatient diabetes teams with adequate staff.

https://www.england.nhs.uk/wp-content/uploads/ 2016/05/stp-aide-memoire-diabetes.pdf

## Inspirational talks about diabetes

There is a new resource with talks from people with type 1 diabetes chaired by Justin Webb (BBC journalist) which colleagues and patients might find useful. http://talkingaboutdiabetes.co.uk

### Quality and Outcome Framework (QOF) has not reduced mortality

A recent publication shows that there has been no significant improvement in the mortality rates of the population between 1994 and 2010 compared with 26 comparator countries after the introduction of the QOF scheme.

http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(16)00276-2.pdf

### WHO report shows diabetes rate quadrupling to 422 million

A new report shows that the global incidence of type 1 and type 2 diabetes has increased four times since 1980, rising from 108 million cases to 422 million in 2014. The report calls for integrated approaches to prevent and manage diabetes and prevent obesity. http://apps.who.int/iris/bitstream/10665/204871/1/9789241 565257\_eng.pdf?ua=1

### Diabetes on the key priority list of NHS England's business plan for 2016–17

NHS England has recently published its business plan for 2016–17. Diabetes is one of the 10 key priority areas. The budget is 105.8 bn, £5.2 bn higher than last year. Prevention will be a priority. The plan also supports a number of commitments to research, innovation and Patient Activation Measures (PAM).

https://www.england.nhs.uk/wp-content/uploads/ 2016/03/item-4-31-03-16.pdf

# National Clinical Directors announced

NHS England has announced a new set of National Clinical Directors (NCD). Professor Jonathan Valabhji will continue as NCD for Obesity and Diabetes and Dr Partha Kar will join him as Associate NCD.

https://www.england.nhs.uk/about/whos-who/ncd/

### New JBDS guidelines published for the management of diabetes on dialysis units

The new guidelines emphasise specialist diabetes input for all patients with glycaemic instability, questionable reliability of HbA<sub>1c</sub>, target HbA<sub>1c</sub> of 58–68 mmol/mol, avoidance of metformin and sulphonylurea, cautious use of repaglinide, some benefit with unlicensed use of pioglitazone, use of DPP4 inhibitors with dose reductions if needed, reduction in insulin dose on dialysis days, 20–30 g carbohydrate if

pre-dialysis glucose <7 mmol/L, adequate dietetic input, hypoglycaemia education and weight loss if transplant is being considered, among other recommendations.

http://www.bjd-abcd.com/index.php/bjd/article/view/134 Links to the full guidelines and other recent JBDS guidelines (discharge planning) are as follows:

http://www.diabetologists-abcd.org.uk/JBDS/JBDS\_Renal-Guide\_2016.pdf

http://www.diabetologists-abcd.org.uk/JBDS/JBDS\_Renal-GuideAbbreviated\_2016.pdf

http://www.diabetologists-abcd.org.uk/JBDS/JBDS\_Discharge\_Planning\_Final\_2015.pdf

### 3rd joint ABCD Renal Association meeting – Advances and Controversies at the NEC Birmingham on 28th February 2017

(Peter Winocour)

The new national guidelines will be launched and discussed in this meeting. We have been able to continue the arrangement for junior medical and AHP team members to attend the meeting free of charge and to have the opportunity to present local work at attended poster sessions with judged submissions selected for an oral session. Please spread the word.

### National Institute of Health Research (NIHR) Horizon Scanning Review of New and Emerging Non-invasive Glucose Monitoring Technologies

#### (Chris Walton)

The NIHR Horizon Scanning Research and Intelligence Centre has published a horizon scanning review on new and emerging non-invasive glucose monitoring technologies in development for people with diabetes. The report also summarises the views expressed by healthcare professionals and people with diabetes and their carers on the technologies identified. Forty products based on technologies as diverse as Raman spectrometry and temporary tattoos using reverse iontophoresis are identified. Of these products, 39 are in development with only the FreeStyle Libre launched. Two others (Sugarbeat and Eyesense) may launch this year and five more in the next two years.

http://www.hsric.nihr.ac.uk/news/review-published-new-andemerging-non-invasive-glucose-monitoring-technologies/

### Hertfordshire Diabetes Conference and Integrated Education: 3rd year of success

(Ana Pokraiac and Andrew Solomon) We report 3 years of a highly successful new education system for diabetes in Hertfordshire. In 2013 we set up the Hertfordshire Diabetes Conference. It's an event for professionals (primary care, community-based, secondary care and commissioners) to enable exchange of knowledge. It includes local and national speakers and has an exciting debate at the end! Hertfordshire Diabetes Education is now an established charity. This year our theme will be around primary, secondary and tertiary prevention of diabetes and its complications. The conference was attended by 220 people and attracted high satisfaction scores (94% positive from 95% of attendees). The initiative was awarded the Niru Goenka Lecture in 2015 and has been recognised for Innovation by Diabetes UK.

### Interesting recent research

### A rapid-fire collection of interesting recent developments in diabetes

### Meta-analysis suggests aloe vera may be useful in people with diabetes

The publication covering nine studies shows a decrease in fasting blood glucose by 2.6 mmol/L (p<0.0001) and HbA<sub>1c</sub> by 1.05% (p<0.004). http://online.liebertpub.com/doi/pdf/10.1089/acm.2015.0122

### Butter may reduce diabetes, may not increase heart disease but may increase mortality slightly

In a meta-analysis and systemic review of nine publications from 15 countries covering 6.5 million person-years of follow-up, one tablespoonful (14 g) of butter consumption was weakly associated with all-cause mortality (RR 1.01, 95% CI 1.00 to 1.03, p=0.045) but was not associated with cardiovascular disease, coronary heart disease or stroke and was slightly protective for new diabetes (RR 0.96, 95% CI 0.93 to 0.99; p=0.021).

http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0158118

### Media coverage of side effects of statins might have reduced statin uptake by patients

In a recent study covering primary care statin data in the UK, the evidence appears to suggest that negative media coverage of statins (2013–14) was associated with a transient (6 months) rise in the number of patients stopping statins for primary and secondary prevention (OR 1.11, 95% CI 1.05 to 1.18; p<0.001 and OR 1.12, 95% CI 1.04 to 1.21; p=0.003, respectively).

http://www.bmj.com/content/353/bmj.i3283

### Dogs might help detect hypoglycaemia by smelling isoprene in breath

In a recent publication in *Diabetes Care* the researchers suggest that dogs might be able to detect volatile organic compounds like isoprene during hypoglycaemia and alert their owner. This can offer a non-invasive alternative to capillary blood glucose. http://care.diabetesjournals.org/content/39/7/e97

### Higher mortality in people with diabetes after acute MI

In a recent study, patients with diabetes were found to be at higher risk of death after acute myocardial infarction than people without diabetes (35.8% vs. 25.3%). The trend was similar for both STEMI and non-STEMI. The risk remained higher even after adjustments for comorbidities, risk factors and cardiovascular treatments.

http://jech.bmj.com/content/early/2016/06/15/jech-2016-207402.short

### Some patients with PCOS may have adrenal origin of androgens

In a study published in *JCEM*, researchers found that a subset of women with polycystic ovary syndrome (PCOS) have excessive adrenal production of androgens resembling micronodular adrenal hyperplasia and have smaller adrenal volumes.

http://press.endocrine.org/doi/10.1210/jc.2015-4019

### Statins help reduce cardiovascular risk in some patients but not in others

In a population-based study the researchers showed that, among patients with stable ischaemic heart disease taking statins, patients with LDL cholesterol of 1.9–2.5 had a lower risk of cardiovascular events than those with LDL cholesterol of 2.5–3.3, but there was no additional benefit in patients who had LDL cholesterol lower than 1.99 mmol/L.

http://archinte.jamanetwork.com/article.aspx?articleid=252 8289

#### Pioglitazone effective in NASH

Pioglitazone use appears to be helpful in fatty liver and non-alcoholic steatohepatitis (NASH). 58% of patients with NASH and prediabetes or type 2 diabetes randomly assigned to pioglitazone achieved a reduction of at least 2 points in the NASH activity score in 2 histological categories without worsening of fibrosis and 51% had resolution of NASH (p<0.001). Pioglitazone also reduced hepatic triglyceride content and improved adipose tissue, hepatic and muscle insulin sensitivity significantly. All improvements persisted for over 36 months, although weight gain was more (2.5 kg) with pioglitazone compared with placebo.

http://annals.org/article.aspx?articleid=2529686

### Closed loop system may become a reality for common use by 2018

In this review the authors summarise the most recent developments in closed loop insulin pump and think that they might be sufficiently advanced to be approved for use more generally by 2018. http://link.springer.com/article/10.1007/s00125-016-4022-4

### The possible mechanisms of benefits seen in EMPA-REG OUTCOME™ trial

The authors in this article describe the possible

mechanisms of cardiovascular benefits of sodium glucose linked transporter-2 (SGLT-2) inhibitor empagliflozin seen in the EMPA-REG OUTCOME™ trial. These include reduction in extravascular volume, increased haematocrit, reduction in blood pressure, reduced preload, reduced afterload, reduced arrhythmia and reduction in pathological cardiac muscle hypertrophy and fibrosis, among some other putative mechanisms.

http://link.springer.com/content/pdf/10.1007%2Fs00125-016-3956-x.pdf

### Cardiovascular benefits seen in EMPA-REG OUTCOME<sup>™</sup> trial may be because of metabolic changes (thrifty substrate hypothesis)

In a new hypothesis, authors argue that persistent hyperketonaemia seen during treatment with SGLT-2 inhibitors may lead to  $\beta$ -hydroxybutyrate being freely taken up by the heart and oxidised in preference to fatty acids. This helps myocardium at risk by improving its oxygen consumption and may be an additional mechanism (in addition to low BP, diuresis and haemoconcentration) underlying the benefits seen with these drugs.

http://care.diabetesjournals.org/content/39/7/1108

### Empagliflozin reduces micro and macroalbuminuria

In this study the authors report beneficial effects of empagliflozin on microalbuminuria (-32% vs. placebo; p<0.001) and macroalbuminuria (-41% vs. placebo; p<0.001) in 24 weeks. The effect seems to be independent of the effect on HbA<sub>1c</sub>, systolic blood pressure or weight.

http://link.springer.com/article/10.1007/s00125-016-4008-2

### SGLT-2 inhibitors and diabetic ketoacidosis (DKA) in type 2 diabetes

This meta-analysis of 10 eligible RCTs involving 13,134 patients and 14 DKA events found an overall event rate of 0.1% in the SGLT-2 inhibitor group compared with 0.06% in the control group (NS). http://care.diabetesjournals.org/content/diacare/early/2016/06/13/dc16-0885.full.pdf

#### Diabetes reduces life expectancy but, more importantly, disability-free life expectancy (DFLA)

In this article the authors highlight the fact that diabetes may reduce life expectancy by 3 years, but the greater impact is on disability-free life expectancy which can be 8–9 years. Health policy makers and clinicians should therefore seek interventions that might reduce this impact.

http://link.springer.com/content/pdf/10.1007%2Fs00125-016-3948-x.pdf

### Which patients with gestational diabetes are at higher risk of developing type 2 diabetes? In this meta-analysis of 39 studies involving over

95,000 women the authors found that future devel-

opment of type 2 diabetes in this group is more strongly associated with higher body mass index, family history of diabetes, non-white ethnicity and higher maternal age. The risk was also higher with early diagnosis of gestational diabetes, raised fasting glucose, higher HbA<sub>1c</sub> and use of insulin. Multiparity, hypertension during pregnancy and pre-term delivery were also associated with future diabetes. Gestational weight gain, macrosomia in babies or breastfeeding did not appear to confer any risk. http://link.springer.com/article/10.1007/s00125-016-3927-2

### Fetal glucose steal responsible for some cases of macrosomia

In this article the authors argue that early establishment of fetal hyperinsulinaemia may be responsible for diabetic fetopathy, even in patients who appear to be in good control later in pregnancy. This highlights the importance of pre-pregnancy and early pregnancy glucose control in mothers to avoid the development of fetal hyperinsulinaemia which leads to glucose steal from the mother.

http://link.springer.com/article/10.1007/s00125-016-3931-6

### ACCORD follow-up study shows continuing benefit of tight glycaemic control on retinopathy

Even 4 years after the end of the ACCORD trial, patients in the tight glycaemic control arm continue to show lower retinopathy progression than those in the standard treatment group (5.8% vs. 12.7%; p<0.0001). Tight BP control or lipid control does not appear to confer long-term benefit.

http://care.diabetesjournals.org/content/39/7/1089

### DPP4 activity linked to mild cognitive impairment

In this study the authors found that higher plasma DPP4 levels are associated with mild cognitive impairment in the elderly (p<0.001).

http://care.diabetesjournals.org/content/early/2016/06/28/dc 16-0316

### Cocaine and amphetamine regulated transcript (CART) hormone increases insulin and reduces glucagon

In studies on human and mice islets, CART expression was found to be several fold higher. CART increased insulin secretion and decreased glucagon in vivo in mice and in vitro in human and mouse islets. CART-based agents therefore could be of therapeutic use in type 2 diabetes.

http://link.springer.com/article/10.1007%2Fs00125-016-4020-6

### Insulin glargine plus lixisenatide improves glycaemic control with lower hypoglycaemia compared to basal plus or basal bolus regimens

In this randomised controlled trial, patients who

were not adequately controlled on insulin glargine alone were randomised to receive either lixisenatide or glulisine (as an additional injection or as part of basal bolus). HbA1c reduced to a similar extent in all three arms (from 63 mmol/mol to 55, 55 and 53 mmol/mol) but symptomatic hypoglycaemia and weight gain were lower in the lixisenatide group than in the glulisine group.

http://care.diabetesjournals.org/content/early/2016/05/14/ dc16-0014

#### Roux-en-Y gastric bypass (RYGBP) surgery results in higher diabetes remission rate than gastric banding

After 3 years, diabetes remission occurred in 68.7% of participants in the RYGBP group compared with 30.2% following laparoscopic gastric banding (LAGB). Even after adjusting for differences in the degree of weight loss the remission rate remained higher after RYGBP than LAGB, suggesting additional mechanisms beyond weight loss in RYGBP patients.

http://care.diabetesjournals.org/content/39/7/1101

### RYGBP leads to better diabetes remission rates than intensive lifestyle and medical intervention (ILMI)

In this randomised controlled trial, RYGBP led to a greater weight loss at 1 year than ILMI (25.8±14% vs. 6.4±5.8%; p<0.001), higher diabetes remission rate (60.0% vs. 5.9%; p=0.0001) and greater reduction in HbA<sub>1c</sub> (14.3 vs. 4.4 mmol/mol; p=0.04) with fewer or no medications after RYGBP. http://link.springer.com/article/10.1007/s00125-016-3903-x

New guidelines recommend surgical treatment for more people with type 2 diabetes The second Diabetes Surgery Summit (DSS-II) recommends the option of surgical treatment for more people with type 2 diabetes to improve control and reduce cardiovascular risk. It recommends surgery for patients with body mass index (BMI)  $\geq$ 40 kg/m<sup>2</sup> and for those with BMI 35.0–39.9 kg/m<sup>2</sup> if the hvperglycaemia is not adequately controlled by lifestyle and medical treatment. Surgery should also be considered for patients with BMI 30.0-34.9 kg/m<sup>2</sup> if hyperglycaemia is inadequately controlled with medical treatment. These cut-offs should be reduced by 2.5 kg/m<sup>2</sup> for Asian people.

http://care.diabetesjournals.org/content/39/6/861

Lipid lowering therapy reduces cardiovascular mortality in people with type 1 diabetes In this observational study lipid lowering therapy was associated with a 22–44% reduction in the risk of cardiovascular disease and cardiovascular death among people with type 1 diabetes with no history of cardiovascular disease.

http://care.diabetesjournals.org/content/39/6/996

### Addition of liraglutide to insulin in obese people with type 1 diabetes improves control and reduces body weight

This randomised controlled trial shows that liraglutide added to insulin at a dose of 1.2 and 1.8 mg over 12 weeks achieves significant weight loss. small insulin dose reduction and frequent gastrointestinal side effects

http://care.diabetesjournals.org/content/39/6/1027

### Higher blood glucose during gestational

diabetes may predict future atherosclerosis In this retrospective case-control study the authors showed that women who had blood glucose levels higher than 5.5 mmol/L during pregnancy were at higher risk (p<0.001) of developing atherosclerotic disease later in life.

http://onlinelibrary.wiley.com/doi/10.1111/dme.13036/abstract

### Thiazolidinedione addition to metformin is associated with lower cardiovascular events than sulphonylurea addition to metformin

In this retrospective cohort study of patients between 1998 and 2011, second-line therapies added to metformin were compared for cardiovascular events in subsequent years. The thiazolidinedione addition group had significantly lower cardiovascular events compared with the sulphonylurea addition group (HR 0.68, 95% CI 0.54 to 0.85). The DPP4 inhibitor group also had a lower rate compared with the sulphonylurea addition group but the difference was not statistically significant. http://onlinelibrary.wiley.com/doi/10.1111/dom.12692/ab-

GLP-1 receptors are present in the brain and may mediate some of the weight loss

#### benefits of liraglutide

GLP-1 receptors are now demonstrated on neurons in the human hypothalamus, medulla and parietal cortex. In this randomised controlled trial liraglutide decreased activation of the parietal cortex in response to highly desirable (vs. less desirable, p<0.001) food stimuli. Decreased activation in insula and putamen was also noted which are involved in the reward system.

http://link.springer.com/article/10.1007%2Fs00125-016-3874-y

### Type 1 diabetes is associated with higher cancer risk in some organs but lower in others

In this study covering five nations over 9,000 cancers in patients with type 1 diabetes in 3.9 million person-years some but not all cancers were found to be associated with type 1 diabetes. Hazard ratios (HRs) were significantly higher for cancers of the liver, pancreas, endometrium and kidneys. Reduced HRs were found for cancer of the prostate and breast.

http://link.springer.com/article/10.1007/s00125-016-3884-9

### Reversing type 2 diabetes with low calorie diet

Professor Roy Taylor's group has recently demonstrated that the gross morphology of the pancreas changes as type 2 diabetes progresses:

http://www.ncbi.nlm.nih.gov/pubmed/27179658

The loss of intra-pancreas fat content which occurs as a result of rapid weight loss only occurs in people with type 2 diabetes and not in non-diabetic people. This implies a fundamental link between this excess pool of intra-organ fat and type 2 diabetes itself.

http://www.ncbi.nlm.nih.gov/pubmed/26628414 After rapid weight loss, a group of 29 people maintained steady weight over 6 months, and those with shorter duration diabetes who reversed their diabetes remained non-diabetic at 6 months. Notably, no re-accumulation of either intra-hepatic or intra-pancreatic fat occurred even though average BMI after weight loss was 30, implying that each person had crossed their personal fat threshold and no arbitrary cut-off defines the risk of developing type 2 diabetes.

http://www.ncbi.nlm.nih.gov/pubmed/27002059



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# **YDEF NEWS**



There have been a lot of changes in the UK over the last few months, not least Brexit. YDEF continues our tradition of staying very much in Europe with our North European Young Diabetologists (NEYD) meeting which took place earlier this year. In addition, we had our insulin pump course soon after and once again delivered an eagerly anticipated and awaited course full of practical demonstrations and knowledge. Rather than tell you all about it ourselves, we will also let our attendees do so.

### North European Young Diabetologists (NEYD)

This year's NEYD annual meeting was held in Snekkersten, Denmark on 18–20 May. The venue was a perfect backdrop for a busy agenda which covered broad subject matter. We heard from 30 international delegates on subjects ranging from gut hormones to clinical management in type 1 diabetes, vitamin D metabolism to new tools in screening. The international delegates came from Denmark, the Netherlands and Belgium and experiences ranged from medical students to postdoc research fellows. The UK team took nine representatives and Professor Katharine Owen as their senior representative.

Everyone attending NEYD has a 15-minute slot to present their work. This creates a very supportive environment as well as a great arena to learn more about the diabetes research going on in renowned research departments across north Europe. One of the highlights of the trip was the social activities, including an outdoor workshop and delicious three-course meal. This gave us all the chance to get to know our international colleagues better, and forge networks and potential relationships for future research collaborations.

Peter Todd presented his work on diabetes care planning and shares his thoughts on the meeting. I'm so glad I went to NEYD. Before I went I was nervous that my research wasn't of a high enough level or that I was too inexperienced at presenting. However, it was really relaxed and as informal as conferences come – some people presented in T-shirts! Academically it was really helpful for my presentation skills and my understanding of research (plus it's an oral presentation at an international conference on the CV). It was also a really social few days and I got to know people from all the countries involved – professors and students alike! Highly recommended to anyone involved in any level of diabetes research.

Next year the UK will be hosting the meeting. We will be offering all-expenses-paid places to 10 delegates. Applications will open in January for the May meeting and will be advertised on the YDEF website. We would specifically like to thank Boehringer Ingelheim for their support of the UK attendees.

### YDEF Pump Course 2016

Insulin pump therapy is a cornerstone of the modern management of an increasing number of patients with type 1 diabetes (T1DM). Thus, knowledge and application of insulin pump therapy is imperative for all trainees, prompting me to attend the YDEF pump course this year.

The course was divided into multiple sessions over the three days and it would be a misnomer to describe the course as pure 'Pump Course' as the focus was holistic management of T1DM. In this vein, there was teaching on the biology of T1DM, pertaining to understanding insulin therapy and its limitations, aetiology of hypoglycaemia and NICE guidance in this context. Furthermore, workshops on interpreting continuous glucose monitoring downloads, use of pumps in pregnancy and the physiology of exercise and pump therapy were immensely beneficial. Sessions on integrating psychology highlighted the significant psychological morbidity associated with hypoglycaemia, recurrent diabetic ketoacidosis admissions and T1DM in general. The role of structured education in the effective management of T1DM was discussed in light of the evidence and this was a common theme guiding all sessions. One of the most enjoyable aspects of the course was the opportunity to wear an insulin pump (primed with saline) and perform carbohydrate counting at meals. Not only did this exercise serve as an efficient catalyst for empathy with my patients, it also allowed me, first hand, to negotiate the various menus and functions on the pump which was enormously beneficial.

I would highly recommend this course to all colleagues training in diabetes and endocrinology and only wish I had attended it earlier! The pump course organisers and the faculty are to be congratulated on running an excellent course which was highly educational and has allowed me to improve my clinical practice.

Dr Ahmed Iqbal MRC Clinical Research Training Fellow Department of Infection, Immunity & Cardiovascular Disease University of Sheffield Specialty Registrar in Diabetes and Endocrinology Sheffield Teaching Hospitals

Having attended the insulin pump course organised by the YDEF, I have greater confidence in assessing and managing patients in both clinics and emergency situations. The introductory sessions on the NICE guidelines and use of structured educational programmes such as Dose Adjustment For Normal Eating (DAFNE) gave an excellent insight into the criteria for referral for the device and the problems that patients often encounter, even with multiple daily insulin regimes. During the course we were able to use our own pumps sponsored by Roche (Accu-chek Insight) and Medtronic (Minimed 640G). This enabled me to fully understand and comprehend what our patients experience and the challenges they often face. The familiarity of the devices meant that I could answer the frequent questions that my patients often ask. We then had the opportunity to download data and an extremely valuable session on data interpretation, which gave me perspective on adjusting insulin doses, both basal rates and boluses. Insulin pumps have many advantages and clinical trials have shown excellent data; however, patient engagement with the device is essential as they need to be able to interpret the download data and initiate different boluses and basal profiles. The settings need to be adjusted in certain situations such as exercise and illness were also discussed within the course and the insulin changes that may be required.

Other aspects that are vital in manging patients with T1DM were also covered including the psychological impact of long-term illness and designing business plans for service development (e.g. pump services) which could be adapted to all aspects of diabetes care.

Overall this course was exceptional and I would strongly encourage it for all diabetes trainees.

> Samantha Anandappa ST3 Medway Hospital

We would like to thank Roche, Medtronic, Abbott and Advanced Therapeutics UK for their support in delivering this course.

> Dr Ali Chakera E-mail: Ali.chakera@nhs.net

YDEF is dedicated to all diabetes and endocrine trainees and is open for new members to register on our website. Take advantage of our regular newsletters and up to date advertising of a wide variety of courses, jobs and meetings to complement your training.

As always, we are continuously looking to develop and propagate our specialty so do not hesitate to contact us if you have any suggestions or questions! www.youngdiabetologists.org or tweet us @youngdiab

# Diary

### 12-13 September 2016

Edinburgh International Conference of Medicine: Past, Present & Future, Edinburgh International Conference Centre http://www.pastpresentfuture2016.org/home

### 12-16 September 2016

European Association for the Study of Diabetes, Munich, Germany http://www.easd.org/index.php?option=com\_content&view= article&id=69&Itemid=509

#### 22 September 2016

DAFNE Doctor Programme (DDP) Sheffield. http://www.dafne.uk.com

#### 6 October 2016

11th Annual Scientific Meeting of the Cardiorenal Forum RCOG, London. http://www.cardiorenalforum.com

### 26 October 2016

Diabetes & Endocrinology: Two Sides of the Same Coin The Queen Mother Conference Centre, Royal College of Physicians of Edinburgh, Edinburgh. http://bit.ly/Diabetes16 24 November 2016 Preventing Illness 2016 The Wellcome Trust, London. www.preventingillness.co.uk

30 November–1 December 2016 World Congress on Clinical Trials in Diabetes (WCTD2016) Berlin, Germany. http://www.wctd2016.com/

### 8 February 2017

Monogenic Diabetes Symposium The Mercure Exeter Rougemont Hotel, Exeter, UK http://www.diabetologists-abcd.org.uk/Lists/Events/ DispForm.htm?ID=69

### 28 February 2017

3rd Joint ABCD Renal Association Meeting – Advances and Controversies NEC Birmingham

#### For other meetings see

http://www.diabetologists-abcd.org.uk/Lists/Events/AllItems.htm