NEWS

Br J Diabetes 2016;**16**:93-97

Rowan Hillson Insulin Safety Award winners announced

The winners of this best hypoglycaemia avoidance initiative competition were announced on 1st April. The judging criteria were defined by the Safe Insulin Prescribing Group (Umesh Dashora, Debbie Stanisstreet and Erwin Castro) on behalf of Joint British Diabetes Societies. There were seven submissions in total, and these were judged by a panel of independent judges chaired by Dr Rowan Hillson.

Gerry Rayman and team from Ipswich Hospital won the competition and Kim Bull, Amanda Davies, Amanda Veall and team from Royal Cornwall Hospital were runners-up. There was an award ceremony for the winner and runners-up at the ABCD meeting at 19.00 on Thursday 21st April, just after the ABCD AGM and before the drinks reception and dinner at the Renaissance Manchester Hotel.

World's first national diabetes prevention programme launched by NHS England

By 2020, 100,000 people will be recruited in this novel programme. 20,000 places will be available from this year in 27 areas covering 26 million people. Enrolment in the programme will give access to personalised help to reduce the risk of developing diabetes including lifestyle, diet and exercise programme. To be eligible for the programme, individuals should have an HbA_{1c} of 42–47 or a fasting plasma glucose of 5.5–6.9 mmol/L.

http://www.bmj.com/content/352/bmj.i1669?variant=full-text&sso=

Diabetes figures in the top 10 priorities of the Department of Health 2015–20 delivery plan

In a recent publication by the DOH, diabetes is included as one of the priorities. The objective is to improve treatment and care for people with diabetes so that they can better manage their condition and complications can be reduced. Full report on

https://www.gov.uk/government/publications/department-of-health-shared-delivery-plan-2015-to-2020/shared-delivery-plan-2015-to-2020#contents

National Diabetes Audit continues to show deficiencies

In the recent report of the National Diabetes Audit (NDA), the percentage of people receiving eight care processes remains low at 39% and 59% for type 1 and type 2 diabetes, respectively. Worryingly, these figures are the lowest since the NDA began in 2010. The number of people meeting all three targets of glucose, BP and cholesterol remains low at 19% for type 1 diabetes and 41% for type 2 diabetes. GP practices participating in the audit have also declined from 70% in 2013 to 57% in 2015.

http://www.hscic.gov.uk/searchcatalogue?productid=2015

New DVLA guidelines for fitness to drive published

The new guidelines replace the previous one in use for the last 25 years. It details criteria required for people with diabetes to drive safely and includes information on monitoring, hypoglycaemia, eye and foot complications, gestational diabetes, oral glucose-lowering therapies with potential to cause hypoglycaemia and transplant patients.

https://www.gov.uk/government/publications/assessing-fitness-to-drive-a-guide-for-medical-professionals.

New guidelines on how to manage insulin therapy in community safely

Diabetes UK has published a new guide book on how to safely manage insulin therapy in the community. It covers areas such as staffing, work load, competencies, accountability and delegation.

https://www.diabetes.org.uk/Upload/Shared%20practice/How%20To%20Guide%20%233%20-%20How%20to%20manage%20insulin%20administration%20in%20the%20community%20(February%202016).pdf

EMA recommendations to minimise the risk of diabetic ketoacidosis (DKA) with SGLT 2 inhibitors

The report includes recommendations such as being aware of atypical presentation of DKA (DKA with normal glucose levels), seeking medical attention in the presence of symptoms like rapid weight loss, vomiting and stomach pain, early treatment, caution in patients with low insulin reserve or reduced insulin doses, caution in major illnesses or surgery, and avoiding use in type 1 diabetes.

http://www.ema.europa.eu/ema/index.jsp?curl=pages/news_and_events/news/2016/02/news_detail_002470.jsp&mid=WC0b01ac058004d5c1

Interesting recent research

A rapid-fire collection of interesting recent developments in diabetes

Sedentary behaviour increases diabetes risk

In a study published in *Diabetologia*, an hour of sedentary time was associated with a 22% higher risk of type 2 diabetes and a 39% higher risk of metabolic syndrome. The study was conducted on participants from the Maastricht study and involved wearing an activity meter for 24 h.

http://link.springer.com/article/10.1007/s00125-015-3861-8

Sleeping difficulty increases the risk of diabetes

In a study published in *Diabetologia*, sleeping difficulty was significantly associated with the development of type 2 diabetes. A total of 6,407 incident cases of type 2 diabetes over 10 years were analysed for sleeping difficulty. Women reporting sleeping difficulty, frequent snoring, sleeping duration of <6 h and sleep apnoea had a fourfold increased likelihood of type 2 diabetes.

http://link.springer.com/article/10.1007/s00125-015-3860-9

Caffeine intake reduces exercise hypoglycaemia but may increase late hypoglycaemia in type 1 diabetes

In a study published in *Diabetic Medicine*, researchers showed that caffeine ingestion at the

start of exercise in the afternoon reduced the drop in glucose with exercise but was associated with low glucose levels next morning.
http://onlinelibrary.wiley.com/doi/10.1111/dme.12857/abstract.

Twice daily insulin degludec aspart combination leads to similar control with lower hypoglycaemia as twice daily biphasic insulin aspart

In a study published in *Diabetic Medicine*, the insulin degludec aspart group achieved a similar level of glucose control as the biphasic insulin aspart group, but with lower overall and nocturnal confirmed hypoglycaemia.
http://onlinelibrary.wiley.com/doi/10.1111/dme.12982/abstract

Comparative review of all the currently available GLP-1 receptor agonists

In a recently published comparison of all the currently available GLP-1 receptor agonists, different compounds had different profiles. HbA_{1c} reduction was greater in liraglutide trials than exenatide and albiglutide but similar to dulaglutide. Short-acting compounds like lixisenatide and exenatide have a greater effect on postprandial glucose whereas the longer-acting compounds reduced plasma glucose throughout the day. Weight loss with liraglutide was similar to exenatide twice daily but greater than exenatide once weekly, albiglutide and dulaglutide. Nausea was, however, less with exenetide once weekly and albiglutide than with liraglutide and exenetide twice daily. Injection site reactions were more frequent with both exenetide formulations than with liraglutide and dulaglutide. The choice of GLP-1 receptor agonists can therefore be tailored to suit the individual need.
http://onlinelibrary.wiley.com/doi/10.1111/dom.12596/abstract

Vitamin D supplements do not improve HbA_{1c}

In this randomised controlled trial, the addition of vitamin D to people with high risk of diabetes did not improve HbA_{1c} after 4 months. However, pulse wave velocity was modestly reduced compared with placebo, suggesting some beneficial effect on arterial stiffness.
http://onlinelibrary.wiley.com/doi/10.1111/dom.12625/abstract

Intensive control improves long-term kidney prospects: ADVANCE-ON

Intensive control during the ADVANCE trial has now been shown to continue to have a beneficial effect on kidneys after 8 years. In a recently published study on the 8,494 survivors of ADVANCE trial, HbA_{1c} benefit disappeared by the first post-trial visit but the risk of ESKD remained lower in the intensive treatment group after 9.9 years of overall follow-up (29 vs. 53 events, HR 0.54, p<0.01). There was no difference in the mortality or cardiovascular outcomes.
http://care.diabetesjournals.org/content/early/2016/03/22/dc15-2322.full.pdf+html

Artificial pancreas in pregnancy

In this study, researchers showed the feasibility, safety and effectiveness of an artificial closed-loop pancreas in pregnant patients with type 1 diabetes. Patients in the closed-loop arm, which consisted of a pump, continuous glucose monitoring system and an algorithm on a device like an i-Pad, had 25% fewer periods of hyperglycaemia than patients in the pump-only arm. There was no difference in hypoglycaemia or insulin dose. In this study of 16 patients, 14 women preferred to continue with the closed-loop system after delivery. Diabetes UK 2016 Professional Conference, Glasgow, 2 March 2016; abstract A25.

Systolic blood pressure lower than 140 may be harmful in type 2 diabetes

In a systematic review and meta-analyses of randomised controlled trials including over 73,000 patients published in the *BMJ*, the authors suggest that blood pressure lower than 140/80 in people with type 2 diabetes is associated with increased risk of cardiovascular disease and a tendency towards higher all-cause mortality.
http://www.bmj.com/content/352/bmj.i717

Gastric bypass surgery better than intensive lifestyle modification or medical treatment in treating diabetes

In a recently published randomised controlled trial, patients who were randomised to gastric bypass surgery had greater weight loss at 1 year than those given intensive lifestyle intervention (25.8±14.5% vs. 6.4±5.8%, p<0.0001). Diabetes remission was also greater in the surgical group (60% vs. 5.9%, p<0.002). There were significantly fewer or no diabetes medications after gastric bypass. No life-threatening complications occurred.
http://link.springer.com/article/10.1007/s00125-016-3903-x

New way of treating diabetes by insulin secretion from an exogenous pancreas

A novel way of micro needle patch delivering insulin from externally implanted beta cells in response to blood glucose levels is published.
http://onlinelibrary.wiley.com/doi/10.1002/adma.201506025/full

Brown adipose tissue may protect against diabetes

Brown adipose tissue may protect against diabetes. In a recent publication brown adipose tissue glucose utilisation and thermogenic responses are characterised.
http://www.sciencedirect.com/science/article/pii/S1550413116300560

Diabetes increases risk of *Staphylococcus* aureus infection

Diabetes increases the risk of *Staphylococcus* infection by three times according to a study in 30,000 people in Denmark. People with type 1 diabetes and with other medical problems were found to be at even greater risk. Longer duration of diabetes and poor control added further risk.
http://www.medicalnewstoday.com/releases/307745.php

Extracellular hydrogel may improve peripheral vascular disease

In a rat hindlimb ischaemia model, extracellular matrix hydrogel has been shown to promote tissue remodelling, new angiogenesis and perfusion.
http://basictranslational.onlinejacc.org/content/1/1-2/32

Relaxing glycaemic target can increase the rate of infections

In a large retrospective cohort analysis in 19,806 people aged 65 years or more, HbA_{1c} >69 mmol/mol (8.5%) was predictive of higher rates of infections like pneumonia, urinary tract infections and skin and soft tissue infections.
http://www.thelancet.com/journals/landia/article/PIIS2213-8587%2816%2900043-7/fulltext

Pioglitazone linked with bladder cancer

In a population-based cohort study, pioglitazone but not rosiglitazone was found to be associated with a 63% higher risk of bladder cancer over 14.5 years.
http://dx.doi.org/10.1136/bmj.i1541

Risk of renal failure, amputation, blindness and hypoglycaemia with antidiabetic drugs

In an open cohort study there were significantly increased risks of severe renal failure (HR 2.55, 95% CI 1.13 to 5.74) in patients on gliptin or glitazone monotherapy compared with metformin monotherapy. Patients prescribed triple therapy including sulfonylureas had a significantly higher risk of hypoglycaemia than those prescribed metformin only, but a significantly reduced risk of blindness.
http://dx.doi.org/10.1136/bmj.i1540

Predicting diabetes by a blood marker

A new study has found that aging impairs beta cell activities and therefore increases the risk of type 2 diabetes. The study also found that these changes can be detected by a blood test for epigenetic biomarker. The test picks up methylation of 241 sites and 83 genes (previously linked with diabetes) in the genome.
http://www.nature.com/ncomms/2016/160331/ncomms11089/full/ncomms11089.html

Hypothyroidism increases the risk of type 2 diabetes

In a study presented recently, a link was shown between hypothyroidism and type 2 diabetes in a prospective population-based cohort study. Over a period of nearly 8 years, higher TSH levels were associated with a higher diabetes risk (HR 1.13, 95% CI 1.06 to 1.45). Higher T4 was associated with a lower risk of diabetes. The risk of progression from prediabetes to diabetes was 1.4 times in the lowest quartile of thyroid function compared with the highest quartile (p=0.002). Screening for and treatment of subclinical hypothyroidism may thus be beneficial in reducing the risk of diabetes.

https://endo.confex.com/endo/2016endo/webprogram/Paper24901.html

Whey protein breakfast can help reduce postprandial glucose in type 2 diabetes

In a randomised controlled trial presented recently, high calorie (about 600) whey protein breakfast achieved greater weight loss than cereal breakfast and protein breakfast (8.4% vs. 3.8% and 6.8%, p<0.0001). HbA_{1c} improvement was also greater with whey protein breakfast compared with the other two (11.5% vs. 4.6% and 7.7%, p<0.0001). Similarly, postprandial glucose was lowest in whey protein breakfast.

https://endo.confex.com/endo/2016endo/webprogram/Paper25019.html

Statins useful in patients with intermediate risk

In a recent NEJM publication the authors show that rosuvastatin 10 mg daily reduces LDL (by 26%) and cardiovascular events (3.7% vs. 4.8%, p=0.002) compared with placebo in diverse ethnicity patients with intermediate risk. There was no increase in cancer or diabetes but more cataracts (3.8% vs.3.1%, p=0.02) and muscle symptoms (5.8% vs. 4.7%, p=0.005) occurred in the statin group.

http://www.nejm.org/doi/10.1056/NEJMoa1600176

VLCD diet reverses diabetes

Professor Roy Taylor's group from Newcastle shows that the reversal of type 2 diabetes with a very low calorie diet (VLCD) for 8 weeks can be maintained by a robust programme of healthy diet and weight maintenance and for at least 6 months. 12/40 patients responded to VLCD with fasting glucose <7 mmol/l with the initial intervention and 13/40 maintaining remission after 6 months. In those who responded the HbA_{1c} level fell (from 7.1±0.3 to 5.8±0.2) and their first phase insulin response was resumed.

BP, lipid and diabetes control reduces cardiovascular risk by 60%

In a study of 2,018 adults without known cardiovascular disease (CVD), individuals achieving target BP, LDL cholesterol and HbA_{1c} over 11 years showed fewer cardiovascular events. People with one, two or all three risk factors at target levels (vs. none) showed lower adjusted risks of CVD events by 36%, 52% and 62%, respectively (p<0.001).

http://care.diabetesjournals.org/content/early/2016/03/29/dc15-2439

Diary 2016

6 June

5th National Diabetes Inpatient Conference
Royal Society of Medicine, London
https://www.rsm.ac.uk/events/events-listing/2015-2016/sections/endocrinology-diabetes-section/edg03-the-5th-national-diabetes-inpatient-conference.aspx

30 June and 1 July

The Multidisciplinary and Surgical Management of Charcot Foot
The Kia Oval Cricket Grounds, London
https://diabeticfootcharcot.eventbrite.co.uk

7 July

Advances in Obesity: From Prevention to Treatment
Postgraduate Medical Centre, Derriford Hospital, Plymouth
http://estore.plymouth.ac.uk

13 July

Westminster Health Forum Seminar - Improving Diabetes Outcomes: Prevention, Innovation and New Models of Care
http://www.westminsterforumprojects.co.uk/forums/event.php?eid=1158&t=15015

12-16 September

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

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

6 October

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

If you are looking for a specific date, sub-specialty or place for conference, one of the following sites might help –

http://www.doctorsreview.com/meetings
http://www.endocrinology.org/meetings/world.aspx
http://www.continuingeducation.net/schedule.php?profession=Physicians
http://www.ese-hormones.org/meetings/World.aspx
http://www.medical.theconferencewebsite.com/conferences/endocrinology-and-diabetes

Follow us on twitter @BJDVD_Editor

Join the LinkedIn group http://www.linkedin.com/groups/British-Journal-Diabetes-Vascular-Disease-8118305

News editor: Dr Umesh Dashora
E-mail: news@bjd-abcd.com

http://dx.doi.org/10.15277/bjd.2016.083

The ABCD News is not subject to peer review

YDEF NEWS

YOUNG DiABETOLOGISTS & ENDOCRINOLOGISTS
EDUCATION • REPRESENTATION • COMMUNICATION

YDEF Day and the next generation

The last few months have been very busy for YDEF, standing true to our vows on education, representation and communication. We have been representing our trainees and voicing concerns with the BMA during the junior doctor contract dispute and have recently written an analysis of events (in the previous *BJD* issue). We also found time to deliver another truly unique YDEF Day and had a slight re-shuffle within our ranks.

YDEF Day

YDEF Day has always been the highlight in our calendar. Our flagship event, offering the highest quality of speakers and talks in a relaxed atmosphere whilst delivering unique perspectives covering areas not always available in other conferences – and of course designed specifically for trainees. This year, under the organisation of Myuri Moorthy, YDEF Day was held on 1st March in the SECC Glasgow. We were delighted to offer a novel YDEF Day by (literally) putting the patients first; the theme for this year was 'patient empowerment' and therefore who better to lead talks and guide us trainees than the patients themselves!

The day started off with an introduction by Ali Chakera, who reminded us about the important role YDEF plays for diabetes and endocrine trainees. This is particularly relevant with the imposition of the new Junior Doctor contracts. The YDEF has represented our trainees at the British Medical Association Multi-Speciality Working Group to highlight the potential detrimental impact this contract would have on our current high standards of training and education.

The rest of the day was divided into specific sessions targeting various areas of patient-centred care. We had a wonderful team of dedicated people with diabetes who took time to discuss and explain to us about living with diabetes and provided some thought-provoking insight into their lives. Workshops included diabetic and endocrine complications of HIV, bariatric medicine, motivational interviewing, exercising with diabetes, staying safe with diabetes whilst being a normal teenager, how to create the ideal service and living with a pump.

Chris Askew, the new Chief Executive of Diabetes UK, gave this year's keynote lecture. He discussed the role Diabetes UK can have in our training and opportunities they can offer – for example, research, resources to improve care and patient education tools.

Ending the day was a dynamic panel discussion. The expert panel comprised Chris Askew, David Nicolson, John Quin, Nick Oliver, Partha Kar and Paul Buchanan. Members of the audience asked questions such as "Will a 'sugar tax' have any impact on the rate of people developing type 2 diabetes, and should we as a specialty endorse it?"; "Given the restraints in NHS funding, should the money used on pumps be diverted to psychology services instead?"; and "Will the NHS survive without an NHS tax?" The panel's varied opinions made for entertaining debate and the true winners were the audience.

Once again, the day would not have been possible without sponsorship from Sanofi and we are grateful for their support.

Committee changes

Sadly, all good things must come to an end and, to this effect, we had to see two of our longest serving members, Kelly Cheer and Milan Piya, step down from their roles on the Committee. Both have overseen changes within YDEF and lent stability to the changing members. Their dedication and drive has seen YDEF improve year on year and develop into what we are today. However, they now continue on in their consultant journey and will never be far away from YDEF. Saying goodbye also means saying hello, and we welcomed three new and enthusiastic trainees to shape our future. If that wasn't enough change, we also had Ali Chakera stepping down as Chair (but continuing on the Committee) and Muna Nwokolo taking on the responsibility to lead us further!

Adnan Agha

Adnan Agha is a trainee in the West Midlands Deanery. He has worked as a medical registrar in four different national healthcare systems, giving him a unique perspective on our current training structure. He is interested in improving access to and delivery of psychological care to people with diabetes and also to healthcare professionals. Adnan would like to assess the impact of burnout amongst trainees providing care for patients with complex needs.

'Jason' Wui Hang Cheung

Wui Hang (Jason) is a diabetes and endocrinology trainee in the North Central London Deanery. He is currently studying for an MD(Res) doctorate degree focusing on diabetes and the gut hormone response post bariatric surgery. His particular interests include severe complex obesity and its surgical management. As a Committee member he will ensure that trainee wellbeing remains a priority by continuing involvement in an online support group he helped to set up for doctors in distress ('Tea and Empathy').

Sophie Harris

Sophie Harris is a trainee in the South London Deanery. She is currently taking three years out of programme to work with the local academic health science network (AHSN) and CLAHRC on a PhD project investigating reasons for non-attendance at DAFNE. She is particularly interested in improving variation in care through quality improvement projects and patient education, empowering people to better self-manage their diabetes.

Upcoming YDEF courses

YDEF EASD-Lilly Scholarship
Our ever popular scholarship to attend the EASD meeting returns. We offer the opportunity for a select few trainees to attend the EASD meeting in Munich this year. This is a chance to expand your knowledge and experience a large international meeting. Applications will be opening shortly.

ABC of D & E
New for 2016, the ABC of D & E is a course specifically aimed at new trainees to the specialty (ST3 and ST4), explaining the basics including typical conditions and decisions encountered as a trainee. A must for all new registrars! Date to be confirmed shortly.

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

Book review

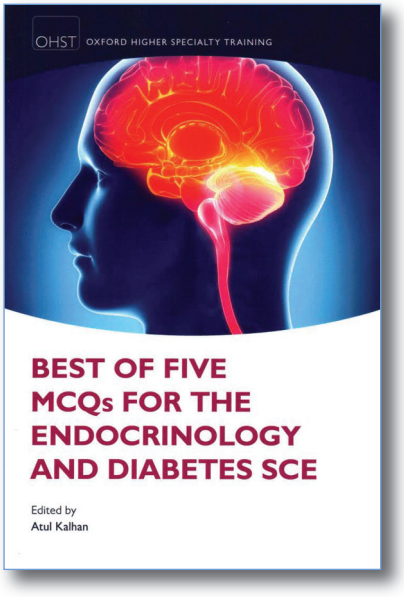
Br J Diabetes 2016;**16**:97
http://dx.doi.org/10.15277/bjd.2016.084

Title: Best of Five MCQs for the Endocrinology and Diabetes SCE

Edited by: Atul Kalhan

Publisher: Oxford University Press, 2015

ISBN: 978-0-19-872933-4



Dr Atul Kalhan, a Diabetes and Endocrinology Consultant at Cardiff and Vale University Health Board, has written this book to help trainees preparing for the Specialty Certificate Examination (SCE). The book contains many best of five multiple-choice questionnaires with explanatory answers and up-to-date references and best practice guidelines.

The Federation of the Royal College of Physicians, in conjunction with the Society for Endocrinology and the British Association of Clinical Diabetologists, developed the SCE for Endocrinology and Diabetes. In August 2007 the SCE became a compulsory component of the certification assessment. It is still regarded as a very recent change in the training curriculum, and the book is a very welcome addition. With the exception of textbooks and guidelines, there has been little in the way of proper resource to aid trainees.

The book is divided into six sections which cover the main curriculum objectives: pituitary gland and hypothalamus; thyroid gland; parathyroid gland; adrenal gland; reproductive endocrinology; and diabetes and lipid metabolism. It starts with a glossary table of all the abbreviations necessary to aid the reader.

There are over 300 best of five format practice questions. The questions are very clear and in each section a variety of topics is covered within the same curriculum, including common and rare illnesses.

The book involves a comprehensive test of basic principles for more complex disease, yet is suitable for all levels of training. The question and answer format is very useful, not just for the examination but also as a quick refresher in daily practice.

The two parts that I particularly liked about the book are the disease summary table and the table of differential diagnoses, which I found to be very useful and easy to remember. Not ignoring other points of reference and guidelines provided with each answer very helpful indeed.

In summary, this is a well-structured informative book which is clear and easy to understand and lends itself very well as an add-on to textbooks and clinical experience. It is a useful resource for those preparing for the SCE and is an excellent addition to online resources.

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ABCD
Association of British Clinical Diabetologists

Canagliflozin (Invokana) Nationwide Audit in progress

On January 24th 2016 ABCD launched the Nationwide Audit of **canagliflozin** in real clinical use in the UK

Does your centre use canagliflozin (Invokana)?

If yes, **REGISTER YOUR CENTRE!**
at http://www.diabetologists-abcd.org.uk/n3/Canagliflozin_Audit.htm

- you are invited to enter your patients' data into the **bespoke online tool**
- you will be able to **analyse your local data easily**
- the data will be automatically added to the **national data in anonymised form**
- we can provide **easy-to-complete paper proformas** for use in clinic if preferred

Please remember:

- the more data, the more complete our understanding of of canagliflozin in real clinical practice
- all contributors will be listed in publications arising from data submission