ABCD Autumn meeting report, London

The Grand Hall at BMA House deserved its name and provided an excellent forum for the ABCD Autumn meeting, 9-10th November 2017

Session 1

This year's opening guest speaker, Professor Per-Henrik Groop, provided an excellent review of the pathogenesis and approaches to managing microvascular complications. Professor Groop, from Finland, who had previously worked in London, eloquently reviewed data on nephropathy-related mortality. He also explored what we can do to prevent the development and progression of disease, proposing we should be advocating intensive exercise in these patients.

Potential advantages of newer diabetes hypoglycaemic classes were reviewed; relevant data from sub-analyses of trials using empagliflozin and liraglutide were discussed. Of great interest were data presented reviewing the effects of SGLT2 and ACE inhibitor classes on glomerular function and tubular function.

A model of renal hypoxia was postulated which represents a paradigm shift in thinking.

A new 'Question Time' session panel which included experts Professor Clifford Bailey and Dr Rob Gregory debated questions relating to population versus individual HbA_{1c} targets and the use of newer glucose sensor methods.

Session 2

Session 2 included data-enriched clinical updates on retinopathy and lipid management.

Professor Mike Sampson discussed the benefits of a regional integrated pathway for severe hypoglycaemia for a large geographical area. Some variability in ambulance staff practice was highlighted in the Q&A which was of potential concern.

The oral abstract presentations included topics spanning a wide range of areas: a case highlighting major positive effects of hepatitis C treatment on type 2 diabetes prompted the audience to ask questions, improving inpatient hyponatraemia management with simple interventions; a common problem with simple solution; and use of the Endobarrier device in patients with sleep apnoea and risk scoring patients with SGLT-2 inhibition-related diabetic ketoacidosis.

The Niru Goenka lecture was not given this year due to speaker ill health. Instead, Professor Dev Singh provided a superb presentation on the concept of the 'glycation gap', highlighting variability in glycation of haemoglobin in individuals. He explained the relevance of this to the ACCORD trial. The concept of fructosamine-adjusted HbA_{1c} measurement was introduced and explained. A novel concept of intracellular deglycation was also presented in this thought-provoking lecture.

The endocrine update in adrenal disease was elegantly provided by Professor William Drake, which included novel methods of glucocorticoid replacement, a new trial investigating the utility of a functional scan for the spectrum of Conn's syndrome. Professor Hanna continued the theme by reviewing adrenal incidentaloma management and outlining a NIHR-funded study.

An excellent contemporary review by Professor Stephanie Amiel of the last 18 months in the field of type I diabetes was delivered. This included education, potential benefits of beta cell preservation with immune modulation and trials involving non-insulin classes of medication.

Closing the loop between glucose sensing and insulin delivery aptly closed the afternoon, and this was followed by the announcement of the joint ABCD Travel Research Grant winners.

Correspondence: Dr Dipesh Patel
E-mail: dpatel@doctors.org.uk
https://doi.org/10.15277/bjd.2018.166
Br J Diabetes 2018;**18**:38

ABCD Autumn Meeting Abstracts

https://doi.org/10.15277/bjd.2018.163

The ABCD meeting at BMA House, London in November 2017, saw another strong selection of research, service improvement work and clinical cases submitted for presentation. The top scoring abstracts are included here and the remaining can be found online at www.bjd-abcd.com

Modelling subcutaneous absorption of U100 and U300 insulin glargine in type 1 diabetes

Schiavon M,[1] Visentin R,[1] Dalla Man C,[1] Klabunde T,[2] Cobelli C[1]
[1] University of Padova, Department of Information Engineering, Padova, Italy
[2] Sanofi-Aventis Deutschland GmbH, Drug Design, Science and Medical Affairs, Frankfurt am Main, Germany

Background: Subcutaneous administration of long-acting insulin analogues is often employed in multiple daily injection (MDI) therapy of type 1 diabetes (T1D) to cover patients' basal insulin needs. Among these, U300 and U100 are formulations of insulin glargine indicated for once-daily subcutaneous administration of MDI therapy of T1D. U300 is a new formulation with different absorption kinetics from U100, resulting in less hypoglycaemia in clinical trials. Some models have already been proposed but were not assessed under controlled experimental conditions for both formulations. The objective is to develop a model of subcutaneous absorption of U100 and U300 glargine insulin formulations in T1D.
Methods: The database consists of 24 patients with T1D who