Diabetes and Endocrinology Symposium: thinner, fitter, faster

The Diabetes and Endocrinology Symposium was held on 9 October 2012 at The Royal College of Physicians of Edinburgh

Frances McManus

Clincial Lecturer/Specialty Trainee, University of Glasgow, BHF Glasgow Cardiovascular Research Centre, Glasgow Correspondence to F McManus University of Glasgow, BHF Glasgow Cardiovascular Research Centre, Glasgow B12 8TA Scotland, UK

e-mail

Frances.McManus@Glasgow.ac

DECLARATION OF INTERESTS No conflicts of interest declared.

INTRODUCTION

In the Olympic year, it was appropriate that 'Diabetes and Endocrine 2012: thinner, fitter, faster' was the theme of the College Symposium, updating attendees on a range of topics of interest both to those working in the community as well as secondary and tertiary centres. The increasing recognition of 'off-target effects' of diabetes medications was addressed, before the focus shifted to non-pharmacological interventions for type 2 diabetes in the form of diet and exercise. The programme also included an update on mineral metabolism, concentrating on practical clinical issues, before the Symposium finished with an in-depth update of the management of pituitary disorders.

SESSION ONE: DIABETES THERAPY: INTENDED AND UNINTENDED CONSEQUENCES

Greater awareness of the unintended consequences of anti-diabetic medications has been of increasing interest in recent years. In a topical session Dr Sarah Wild (University of Edinburgh) discussed the complex relationship between diabetes and cancer as well as the possible effect of different diabetes treatment on cancer risk. She outlined multiple confounding factors that influenced these interactions and described the limitations of the data published to date. Dr Daniel Flannigan (Plymouth Hospital, Devon) addressed the most common unintended consequence of diabetes treatment, hypoglycaemia, highlighting the importance of this clinical problem to the patient as well as in health economic terms. Professor Chim Lang (University of Dundee) discussed the possible beneficial 'off target' effects of metformin in relation to heart function and described emerging areas of investigation with relation to drug-drug interactions between some of the newest oral hypoglycaemic agents DPP-4 inhibitors and ACE inhibitors. This was an area of much interest to both the participants in Edinburgh as well as listeners around the world, provoking questions from both audiences.

SESSION TWO: TYPE 2 DIABETES, FROM CAUSE TO CURE.

The concept that type 2 diabetes can be reversed by diet alone was addressed by Professor Roy Taylor (University of Newcastle), who discussed the results of the Counterpoint study² in the context of his 'twin cycle' hypothesis on the reduction of food intake. This study has provoked a lively response both from the scientific community as well as from patients with type 2 diabetes, demonstrating that a 600 kcal/day diet for a short period led to the reversal of diabetes in seven out of ten subjects.

The Stanley Davidson Endowed Lecture was delivered by Professor Nick Wareham (Addenbrooke's Hospital, Cambridge) who heads the MRC Epidemiology Unit. The benefits of screening for type 2 diabetes were described and placed in the context of the population burden of disease; the audience was reminded of the relatively small contribution that this would make to population health.³ He discussed possible approaches to preventing type 2 diabetes by addressing public health and environmental factors and whether this should be targeted at a population level or towards individuals.

SESSION THREE: MINERAL METABOLISM UPDATE

The third session of the Symposium shifted the focus from diabetes to another common condition, osteoporosis, which is increasing in prevalence in our clinics and surgeries. Professor Alistair McLellan (Western Infirmary, Glasgow) reminded the audience of the morbidity and mortality burden of osteoporosis, before discussing a rational approach to fracture prevention. New issues relating to osteoporosis were also highlighted including the emerging association between atypical femoral fracture and bisphosphonate use. Controversies around the measurement of vitamin D were explained by Professor Bill Fraser (University of East Anglia), addressing issues such as defining a normal vitamin D level, establishing the best method of measurement and reviewing the evidence for supplementation.

SESSION FOUR: PITUITARY UPDATE

The focus of the final session was on pituitary disorders. Professor John Wass (University of Oxford) gave an insightful overview of the treatment of acromegaly. Difficulties comparing outcomes from different centres resulting from the lack of a universal definition of cure were discussed. He reminded the audience of the place of dopamine agonist therapy and discussed the emergence of newer agents e.g. pasireotide and pegvisomant. The diagnosis of Cushing's syndrome remains challenging and Dr John Newell-Price (University of Sheffield) illustrated the importance of clinical suspicion in combination with biochemical testing.⁵ He also provoked debate about how the provision of surgical intervention, critical to cure rates of Cushing's

disease, could be centralised. Finally, Dr Neil Gittoes (Queen Elizabeth Hospital, Birmingham) discussed issues around the management of non-functioning pituitary adenomas, providing a useful overview for the non-specialist as well as areas of controversy for those working in the field.

CONCLUSION

The Symposium addressed many important and controversial areas in the field of diabetes and endocrinology. Issues of importance to trainees, general physicians and specialists in the field were tackled by the speakers, leaving the audience with a comprehensive overview, particularly relating to the limitations of pharmacological interventions in the field.

REFERENCES

- I Evans JM, Doney AS, Alzadjali MA et al. Effect of Metformin on mortality in patients with heart failure and type 2 diabetes mellitus. Am J Cardiol 2010; 106:1006–10. http://dx.doi. org/10.1016/j.amjcard.2010.05.031
- 2 Lim EL, Hollingsworth KG, Aribisala BS et al. Reversal of type 2 diabetes: normalisation of beta cell function in association with decreased pancreas and liver triacylglycerol. *Diabetologia* 2011; 54:2506–14. http://dx.doi.org/10.1007/s00125-011-2204-7
- 3 Simmons RK, Echouffo-Tcheugui JB, Sharp SJ et al. Screening for type 2 diabetes and population mortality over 10 years (ADDITION-Cambridge): a cluster-randomised controlled trial. *Lancet* 2012; 380:1741–8. http://dx.doi.org/10.1016/S0140-6736(12)61422-6
- McLellan AR, Wolowacz SE, Zimovetz EA et al. Fracture liaison services for the evaluation and management of patients with osteoporotic fracture: a cost-effectiveness evaluation based on data collected over 8 years of service provision. Osteoporos Int 2011; 22:2083–98. http://dx.doi.org/10.1007/s00198-011-1534-0
- 5 Nieman LK, Biller BM, Findling JW et al. The diagnosis of Cushing's syndrome: an Endocrine Society Clinical Practice Guideline. J Clin Endocrinol Metab 2008; 93:1526–40. http://dx.doi.org/10.1210/ jc.2008-0125