

Diabetes and Endocrinology Symposium: Learning from other specialists

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INTRODUCTION

The diverse effects of many hormone systems and the multifarious complications of diabetes frequently bring the endocrinologist into contact with other disciplines. This symposium sought to draw on the experience gained from long-standing collaborations and to highlight nascent relationships arising from the emergence of new therapies.

THYROID

Mr Geoffrey Rose (Consultant Ophthalmologist, Moorfields Eye Hospital, London) opened the symposium with an account of his evolving approach to the management of thyroid eye disease, highlighting improved outcomes with early anti-inflammatory therapy and judicious orbital decompression surgery. The conflicting evidence base for orbital radiotherapy was identified as an issue requiring further investigation.

Dr Kate Newbold (Consultant Clinical Oncologist, Royal Marsden Hospital, London) provided an overview of best practice in thyroid cancer. Preliminary results from the HiLo study suggest lower doses of ablative radioiodine and the use of recombinant thyroid-stimulating hormone, rather than thyroxine withdrawal, have similar efficacy to current practice. A number of promising tyrosine kinase inhibitors are being assessed in metastatic thyroid cancer and, although some show early promise, these agents are not without potentially serious adverse effects.¹

The thyroid session concluded with Mrs Janis Hickey (Director, British Thyroid Foundation) explaining the role the British Thyroid Foundation plays in providing education and support across the spectrum of thyroid disorders. Feeding back what her members desire from their clinic consultations, the overriding message was one of open and clear communication.

DIABETES

The imminent crossover to the International System of Units (SI) for the reporting of glycated haemoglobin (HbA_{1c}) was convincingly defended by Professor Eric

Kilpatrick (Consultant in Chemical Pathology, Hull Royal Infirmary) as a necessary process of harmonisation, despite the challenges it poses to clinicians accustomed to the current system. Less justifiable is the gathering momentum to adopt HbA_{1c} as a diagnostic test for diabetes, given the non-glucose dependent variation in HbA_{1c} across age, race and certain co-morbidities, as well as the relatively poor concordance with existing diagnostic criteria.²

Professor Christopher Ryan (Professor of Psychiatry, Psychology, Health & Community Systems and Clinical and Translational Science, University of Pittsburgh, USA) delivered the Stanley Davidson Lecture, addressing the question: Is the brain a target organ in diabetes? His expert review will be published in the JRCPE March 2011 issue.

GENERAL ENDOCRINOLOGY

A practical guide to pituitary radiotherapy was offered by Dr Sara Erridge (Consultant Clinical Oncologist and Honorary Senior Lecturer, Edinburgh Cancer Centre). Experience in Edinburgh suggests 91% local control of non-functioning adenomas at 20 years, at the expense of secondary tumour development in 1.9% and an increased relative risk of stroke of 1.45 and 2.22 in men and women respectively.³

The vexed issue of how best to investigate androgen deficiency in older men was expounded by Professor Richard Anderson (Professor of Clinical Reproductive Science, Queen's Medical Research Institute, University of Edinburgh). Although biochemical testosterone deficiency is present in up to 23% of ageing men, when limited to those with clear symptoms this reduces to 2%.⁴ While testosterone replacement can ameliorate reduced libido and erectile dysfunction, caution should be exercised in frail elderly men, where an adverse effect on cardiovascular outcomes may exist.

EVOLVING THERAPIES FOR DIABETES

Islet cell transplantation is becoming established as a treatment option in type 1 diabetes and Mr John Casey (Consultant Transplant Surgeon, Royal Infirmary of

Edinburgh) detailed the progress being made towards the first procedure being performed in Scotland. Islet cell transplantation is currently associated with 20–50% insulin independence at three years, with relatively wide variation between centres. Existing immunosuppressive regimens are being refined, not least because of the appreciable risk of malignancy in transplant recipients. Research continues apace to develop stem cell sources for islet cells to negate the current requirement for four cadaveric pancreata per procedure.

Professor Eric Renard (Professor of Endocrinology, Diabetes and Metabolic Diseases, University of Montpellier, France) asked whether structured education or technological advances (principally continuous subcutaneous insulin infusion) represent the optimal approach to type 1 diabetes management. Evidence demonstrates the efficacy of structured education in improving glycaemic control, but this effect diminishes over time. Continuous subcutaneous insulin infusion improves control and reduces hypoglycaemia but requires motivated patients to fully realise this. Ultimately a complementary approach using education and technology is preferable.

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Finally, Mr Duff Bruce (Consultant in General Surgery, Aberdeen Royal Infirmary) provided a compelling case for the benefits of bariatric surgery in obese diabetic patients. Gastric banding procedures result in approximately 50% loss of excess weight,⁵ with consequent remission of diabetes in 70% of patients in one series. Unfortunately Scotland compares poorly with the rest of Europe in terms of the proportion of eligible and willing individuals receiving surgery, at a meagre 0.7%.

REFLECTION

Diabetes and endocrinology have always benefited from close collaboration with a range of other specialties. In addition to the well-established links, emerging treatments such as islet transplantation and bariatric surgery demand that new relationships are forged. Many of the speakers at this meeting discussed potentially expensive new therapies and, with increasing pressure on resources, it is incumbent on us to work across specialties to ensure patients have access to the most effective care available.