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The Endocrinologist

THE NEWSLETTER OF THE SOCIETY FOR ENDOCRINOLOGY • ISSUE 98

WINTER 2010/11

The solution to obesity?

PLUS

Nobel Prize
for Medicine

Science
escapes the
scissors?

Endobible: the
answer to your
prayers?





► It's all about balance. Over three weeks what do 2263, 87 000 and 123 900 have in common? These are the number of miles covered, feet of ascent achieved (three times that of Everest) and calories consumed by a rider in the 2010 Tour de France, a feat of supreme physical endurance (even if some have, shall we say, a little extra hormonal help ...). The truly remarkable thing is that this energy intake is only one and a half to twice that of many office-based workers who maintain their weight over the same period.

All too frequently clinicians will encounter those in outpatient clinics who are convinced that the First Law of Thermodynamics must be wrong. Many will pay for expensive gym and club membership in an effort to lose weight, but few understand the phenomenal effort needed to burn even a paltry number of calories, and the ease with which all the good work can be undermined by seemingly innocent amounts of food. The Society held a special event addressing these issues at the British Science Festival (see page 7), which had high impact for those attending and resulted in good coverage in the national press. The clear steer was that caloric restriction, rather than attempted calorie burning, is a more viable route to tackling the obesity epidemic – only super-humans have the ability to exercise to anything approaching the example above, and if output, rather than input, is the major focus, then the more 'average Joe' efforts that most can achieve will result in a disheartening and expensive experience for all. The Society's Obesity SIG is working to co-ordinate efforts in this important area (page 12).

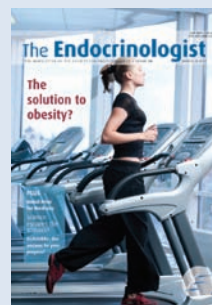
Balance of another nature will be more apparent by the time that *The Endocrinologist* arrives on your desk. The true impact of the UK Spending Review is being digested, with both NHS and Science Research budgets being spared the worst (see page 7), and much credit goes to those petitioning and demonstrating against science cuts. In contrast, cuts to Universities and increased student fees will fundamentally change the higher education vista, with clear impact for many in the Society. At the same time a balanced view is often vital: and it's time to say, 'Your Society Needs YOU!' An exciting new development is the Society's new public website *You and Your Hormones*, aimed at educating the public on all things endocrine by using reliable and validated material from the Society's members. Volunteers are needed to write and review material – for more information see page 5.

The Clinical Committee of the Society performs many and diverse tasks, and has been under the excellent chairmanship of Peter Trainer for the last four years; he is now stepping down from this role (page 4). You'll see from the report that Peter is far too modest in his assessment of the contribution that he has made during his tenure, and we are indebted to him for all the work done through this committee (and wish him well in his attempts to emulate the cycling heroes alluded to above). Vacancies on the committee become available on a rolling basis and are announced in the summer issue of *The Endocrinologist* and on the Society website.

Enhancing patient safety is of key importance. Our nurses' section (page 9) outlines the key roles that endocrine nurse specialists have had in ensuring better pre-hospital care in those with adrenal insufficiency. Aled Rees then gives a fabulous insight into endocrinology in the land of the daffodil and Welsh Choir, as the Endo Train calls on Cardiff (page 10).

It only remains for me to say in this, my last editorial, a big thank you to all the team involved in *The Endocrinologist*: Andy Lowe, Rachel Evans, Julie Cragg, Jennie Evans, Abhi Vora, and Toby Stead, and all the other staff at the Bristol office, who provide faultless input and support. It has been a real pleasure acting as Editor and I wish your new Editor, Melissa Westwood, all the very best when she takes over from next year.

JOHN NEWELL-PRICE



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advertising@endocrinology.org

Deadline for news items for the Spring 2011
issue: **20 December 2010**. Please send
contributions to the above address.

Summer Studentships 2011

Fifteen summer studentships are available to assist undergraduate students in gaining experience by working in a research environment.

Applications are invited from students whose host supervisor is a Society member. A stipend of £185 per week is offered for a period of study of up to 10 weeks, together with £1000 for host department consumables.

The student will normally be an undergraduate following a course in endocrinology or a related life science subject. Students will normally take up the award during the summer vacation before their final year. Priority will be given to students who are Student Members of the Society. For further details see www.endocrinology.org/grants/grant_summerstudentships.html

Deadline: 14 March 2011

2010 NOBEL PRIZE FOR MEDICINE

The Society for Endocrinology would like to congratulate Society member Professor Robert G Edwards on being awarded the 2010 Nobel Prize for Medicine. Professor Edwards' development of *in vitro* fertilization led to the creation of a whole new branch of medicine, and revolutionised the treatments that we are able to offer to patients with infertility. Recognition of the impact of his work is most welcome.

To mark this historic event, all articles published, or co-authored by Professor Edwards in the *Journal of Endocrinology* are now accessible free of charge until 10 January 2011 at the following link:

http://joe.endocrinology-journals.org/misc/Nobel_prize_2010.shtm

Committee News

We would like to welcome the following new committee members:

Professor Jayne Franklyn, Dr Anna Crown, Dr Simon Howell (*Clinical Committee*)

Dr Barbara McGowan (*Finance Committee*)

Ms Anne Marland, Ms Morag Middleton (*Nurse Committee*)

Professor Karen Chapman, Dr Helen Christian (*Publications Committee*)

Dr Julia Clark, Dr Kim Jonas, Dr Tristan Richardson (*Public Engagement Committee*)

Dr Rosemary Bland, Dr Bronwen Evans, Professor Craig McArdle,

Dr Matthew Simmonds (*Science Committee*).

We would also like to take the opportunity to thank the following retiring members of committees who have provided invaluable expertise and have given significant amounts of their time during their terms of office:

Professor Will Drake, Dr Tara Kearney (*Clinical Committee*)

Mrs Jean Munday (*Nurse Committee*)

Professor Stafford Lightman, Professor Jonathan Seckl, Professor Richard Sharpe (*Public Engagement Committee*)

Professor Kevin Docherty, Dr Rob Fowkes (*Publications Committee*)

Dr Jonathan Johnston (*Science Committee*).

If you would like to become involved in the running of your Society, the call for nominations for new committee members will appear in the Summer issue.

JOE/JME basic science journal prize

New Prize for 2011

The Society's journals, *Journal of Endocrinology* and *Journal of Molecular Endocrinology* are pleased to announce a new annual award. Designed to recognise an outstanding young researcher who has made a significant contribution to basic research in endocrinology, the prize is awarded on alternate years by the two journals.

The 2011 prize is to be awarded by *Journal of Molecular Endocrinology*.

The prize consists of a certificate and €2000. The winner's name and details will be published in the Society's newsletter and on the website. The deadline for nominations is 31 December 2010.

Full details can be found at www.endocrinology.org/grants/



MEDAL WINNERS

► We are delighted to announce that we have now selected the medallists for 2012. These were chosen from nominations by the membership, ballot amongst the Nominations Committee and approval by Council.

Dale Medal

Professor Kenneth S Korach
Research Triangle Park, North Carolina, USA

Society for Endocrinology Medal

Dr Sadaf Farooqi
Addenbrooke's Hospital, Cambridge, UK

Transatlantic Medal

Professor Paolo Sassone-Corsi
University of California, California, USA

European Medal

Professor Jens Holst
Panum Institute, Copenhagen, Denmark

Hoffenberg International Medal

Professor Gerard Karsenty
Columbia University, New York, USA

SOCIETY CALENDAR

1 March 2011

National Clinical Cases Meeting

Royal Society of Medicine, London

11–14 April 2011

Society for Endocrinology BES 2011

ICC, Birmingham

SEND YOUR SUGGESTIONS FOR SOCIETY BES 2012

Please submit any suggestions by the end of January 2011 through www.endocrinology.org/meetings/ScientificSessions/index.aspx

Voting for Council members

An online ballot will be held in early March if more nominations are received than there are vacancies available. Note that you will only be able to participate in the ballot if you have paid your 2011 membership fees.

CONGRATULATIONS

Professor Paul Stewart has been appointed to Dean of Medicine, College of Medical and Dental Sciences at the University of Birmingham. Congratulations are also due to Professor Chris McCabe who has been awarded a Chair in Molecular Endocrinology at the University of Birmingham and Professor Wiebke Arlt who has been awarded the RCP Graham Bull Prize.

sfE Clinical Committee – handing over the baton

► Professor Peter Trainer took over as Chair of the Clinical Committee from Professor Michael Sheppard in January 2007. It is difficult to summarise all that the Committee has achieved over the last four years under Peter's leadership, because of the extent of areas in which the Committee has had input, but here is a taster of the kind of things on which the Society has been able to make major advances since the beginning of 2007:

- identifying ways to encourage specialisation in endocrinology; for example, by trying to standardise its teaching to undergraduate medical students and increasing the exposure of trainees to the more interesting aspects of the specialty
- introducing the highly successful Clinical Update Training programme and extending Clinical Cases meetings into the regions
- developing clinical management guidelines for 'neglected' conditions including pituitary apoplexy, disorders of sex development and multiple endocrine neoplasia
- providing guidance useful in daily practice; for example on the use of cabergoline and phenoxybenzamine
- initiating research projects aimed at clarifying information on the use of medicines in endocrinology; for example assessing the risk of cardiac fibrotic reactions in the chronic use of cabergoline
- ensuring that endocrinology is appropriately represented during discussions over the delivery of care in the NHS by engaging with bodies such as the Department of Health, the National Specialised Commissioning Team, NHS Alliance, the National Director for Diabetes and Endocrinology, Clinical Knowledge Summaries, Information Standard and the MHRA

It is the breadth of vision and activity that has ensured that those considering entering the specialty and those already in clinical practice are supported, nurtured and represented.

Peter uses a metaphor to explain how much of all this is down to him: during an interview, a famous conductor was asked what made him so great; the conductor stood up, took out a baton from his inside coat pocket and starting waving it in the air. 'You hear that?' he asked the interviewer; 'I hear nothing' replied the interviewer. 'Exactly!' explained the conductor 'I am nothing without the orchestra'.

Professor Jayne Franklyn (Birmingham) takes over the baton from January 2011, as the new Chair of the Committee for four years: we welcome her to the role.

NEW! Endocrinology Web Portals – your gateway to endocrinology

With the increasing amount of information on the Society's website we thought visitors would appreciate an easier way of finding information that is relevant to them.

The Science Portal:

www.endocrinology.org/science/

Focussing on news, grants, jobs and events that our scientist members may be interested in, the science portal aims to provide a one-stop shop for the latest in endocrine science.

The Clinical Portal:

www.endocrinology.org/clinical/

Developed with the clinician in mind, scientists may also find useful information here. We aim to update the portal regularly to include information that might be of use to clinical endocrinologists.

Please contact abhi.vora@endocrinology.org with feedback and suggestions of how to make the pages even more useful.

OBITUARY

James M Tanner

In the 1950's, Dr James M Tanner was one of the first scientists to study how and when to use human growth hormone to treat children with growth retardation and other deficiencies. He developed the Tanner scale, used to objectively measure a child's development during puberty, and helped to define what constitutes normal growth. This work formed the basis of the modern growth chart, in use worldwide to this day. Equal parts meticulous researcher and creative thinker, for much of his career Dr Tanner was associated with two London hospitals specializing in the care of children, the Institute for Child Health and Great Ormond Street Hospital for Children.

With regret

We are sorry to announce the death of Professor Cathy Wilson.

2011 Specialty Certificate Examination in Endocrinology and Diabetes

Registration for UK candidates

11 February–6 May 2011

Registration for overseas candidates

11 February–11 March 2011

Examination date

15 June 2011

For further information see www.mrcpuk.org/SCE/Pages/ExamDates.aspx

Society BES 2011 Young Endocrinologists' Prize Lecturers

We congratulate Dr Harvinder Chahal and Dr Laura Matthews on winning these prizes. Both will present lectures at the Society BES 2011 meeting in Birmingham. Dr Harvinder Chahal (University of Manchester) will present the Clinical Prize Lecture entitled 'Clinical, genetic and molecular characterisation of patients with familial isolated pituitary adenomas (FIPA) novel mechanism of somatostatin resistance', while Dr Laura Matthews (Queen Mary University of London) will present the Basic Science Prize Lecture 'Novel glucocorticoid effects: signalling from the membrane to the nucleus'.

THE SOCIETY'S PUBLIC WEBSITE NEEDS YOU!

► Development is continuing apace on the new Society for Endocrinology public website, *You & Your Hormones*. This exciting new resource, which aims to provide objective, reliable and scientifically accurate information to the public on endocrinology, is due to be launched in spring 2011.

To be able to launch the website, we need the endocrine community to assist us in reviewing articles for the website. This will be your website and will showcase the fascinating field of endocrinology to a whole new audience. The Society wants this website to be seen as belonging to the membership and representing their broad interests and specialities. However, we can only achieve this with your help, so please do contact us to make sure that we are able to feature articles on your study area.



In addition to brushing up on your reviewing and writing skills, you'll also gain real experience of communicating science to the public, a great skill to be able to include on your CV. You'll also be acknowledged by the Society on the website.

If you would like to play your part and volunteer to help us with reviewing articles for the website, or would like to contribute an article yourself, email public@endocrinology.org or visit www.yourhormones.info

GRANT & AWARD APPLICATION DEADLINES

The Society's grants and awards are always popular – be sure to get your applications in on time.

	APPLICATIONS DEADLINE
Conference Grant	15 December 2010
JOE/JME basic science journal prize	31 December 2010
Undergraduate Essay Prize Competition	14 February 2011
Summer Studentships	14 March 2011
Conference Grant	15 April 2011
Early Career Grant Programme	27 May 2011
Undergraduate Achievement Award	17 June–15 July 2011
Conference Grant	15 August 2011
Postgraduate Essay Prize Competition	17 October 2011
Early Career Grant Programme	27 November 2011
Society for Endocrinology 2012 BES meeting free places	31 October–5 December 2011
Lab Visit Grant	Applications accepted at any time
Clinical Department Visit Grant	Applications accepted at any time
Sponsored Seminar Grant	Applications accepted at any time
Sponsored Poster Session Grant	Applications accepted at any time

For full details and conditions, see www.endocrinology.org/grants/

Royal Society of Physicians Graham Bull Prize 2011

Applications are now open for the 2011 prize which recognises young researchers under the age of 45 years who feel that they have made a major contribution to clinical science. The prize as designed by the Trust is specifically for an application and not for nomination of individuals.

The work can cover a wide range of expertise, such as molecular and cellular biology, imaging technology, psychiatry or health sciences. The award is open to both clinical and basic scientists, who must apply for their own work to be considered. The sum of £1000 is offered on a competitive basis. The closing date for applications is 31 March 2011.

Life Sciences Careers Conference

The second Life Sciences Careers Conference will take place on Wednesday 2 March 2011 at the University of Aston, Birmingham. This conference is aimed at undergraduate students and will include presentations covering a wide range of biology-related careers, a CV workshop and a chance to mingle with the experts over lunch and afternoon refreshments. Registration for the conference is £10 per person and includes entry to the exhibition hall, the lectures, a buffet lunch and refreshments. This conference is co-organised by the Society for Endocrinology in partnership with the Society of Biology, Biochemical Society, Physiological Society, Society for Experimental Biology and the British Pharmacological Society.

For more information and registration see www.societyofbiology.org/education/careers/lsc

Clinical Endocrinology

► After ten years of service, Dame Lesley Rees is stepping down as Chair of the Editorial Board of *Clinical Endocrinology*. Lesley has had a major impact on the success of the journal, and has been very effective in building a close and valued relationship between the Society for Endocrinology and the publishers (initially Blackwell, now Wiley-Blackwell). The Senior Editors of the journal would like to acknowledge Lesley's enthusiasm, kindness and support over the years of her leadership. Professor John Connell will now take over the role of Chair of the Board, having been a Senior Editor of the journal since 2005.

The above changes have led to a review of the senior editorial team. John Bevan (Aberdeen) and Bill Young (Mayo Clinic) will be joined as Senior Editors by Stephen Judd (Adelaide), who is currently the Senior Editor for Australasia. Steven Ball (Newcastle) joins the editorial team with particular responsibility for developing the electronic presence of the journal.

Over the last eighteen months the Senior Editors have worked to raise the overall standard of papers published in the journal and to improve performance figures for the handling of papers. Presently the average time from submission to final acceptance is 72 days; a rapid triage system allows authors to identify, at an early stage, whether their paper is entering the formal editorial process. As a result, the period between acceptance and eventual publication has now been reduced to three months, making *Clinical Endocrinology* a very competitive journal for publication of high quality research and

review papers. The editorial team believe that members should regard *Clinical Endocrinology* as a primary venue for submission of papers that relate to the principles and practice of clinical endocrinology and metabolism. See www.wiley.com/bw/journal.asp?ref=0300-0664

SET for BRITAIN: Monday 14 March 2011

In co-operation with the Royal Academy of Engineering, the Royal Society of Chemistry, the Institute of Physics and the Society of Biology, the Parliamentary and Scientific Committee will again be holding a SET for BRITAIN poster competition for early-stage researchers. The competition will conclude with an exhibition in the House of Commons on Monday 14 March 2011.

In order to accommodate as many different disciplines as possible, the day will be divided into three sessions:

Engineering
Biological and Biomedical Sciences
Physical Sciences (Chemistry and Physics)

Full details can be found on the website:
www.setforbritain.org.uk

The closing date for entries is
Friday 24 December 2010

CLINICAL ENDOCRINOLOGY

THE CLINICAL JOURNAL OF THE SOCIETY FOR ENDOCRINOLOGY

Edited by: J S Bevan, W F Young and S J Judd

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Exercising the public's imagination

In September, the Society went to the British Science Festival in Birmingham to hold a public event entitled 'The obesity epidemic: whose fault is it anyway?'

► Hosted this year in venues across Birmingham, this six day festival held by the British Science Association celebrated, titillated and educated in equal measure. The Society's event, 'The obesity epidemic: whose fault is it anyway?' took place in the main building of Aston University, where an enthused mob had squeezed into the room. A capacity crowd!

Dr Jennie Evans kicked off the proceedings by giving the floor to Dr Abd Tahrani, Clinical Lecturer in Endocrinology and Diabetes at the University of Birmingham. Dr Tahrani gave the assembled masses a low-down on the obesity epidemic as it stands today - a truly staggering public health nightmare of global proportions - before moving on to the intriguing nuances of perception of body size in overweight and obese people.

Professor John Speakman, Director of the Institute of Biological and Environmental Sciences, University of Aberdeen, then used his own data to demonstrate that, contrary to popular belief, levels of physical activity have remained relatively constant over the last thirty years. The audience seemed surprised by this revelation; however, Professor Speakman's next point was a little easier to swallow, being as it was made from chocolate. Chocolate is one of the few foodstuffs that we are incredibly unlikely to throw away, therefore sales figures alone reliably demonstrate how many chocolatey calories we are consuming: sales have doubled since 1997.

Professor Speakman put it to the audience that increased calorific intake is to blame, and whilst exercise has been shown to be good for health, it is poor at effecting weight loss and is an unrealistic vehicle for reversing the epidemic.

Professor Nick Finer, Consultant Endocrinologist at University College London, then took to the stage. Leading the audience through the complex and so far fruitless search for a one-stop pharmaceutical to stem the adipose tide, Professor Finer described the research into the potential directions for future drug research, as well as the effectiveness of drugs and lifestyle intervention in combination. He then addressed the somewhat controversial subject of bariatric surgery, describing its surprising efficacy in effecting weight loss, and how the role of appetite hormones unexpectedly came to the fore during early trials.

We are pleased to report that the audience members were not the only ones to benefit from our speakers' presentations, as the content was also featured in a number of national newspapers including the front page of the *Sunday Times*, the *Guardian*, *Independent*, *Financial Times*, and the *Daily Mail*. The Society would like to extend a huge thanks to its three speakers for a very engaging exploration of a major public health issue, and to the multitude of people that came along to hear where the portion of blame for the obesity pie lies.

TOBY STEAD

SCIENCE ESCAPES THE SCISSORS

► The news that the science budget will be frozen for the next four years was welcomed with a mixture of relief and trepidation by the scientific community on the announcement of the comprehensive spending review (CSR) on 20 October.

Although, as we go to press, we have only the preliminary details of the CSR (a full report will follow in the next issue), the salient facts are these:

- ▷ The science budget is frozen. Taking into account inflation, roughly 7% of the budget (or £321 million) will have to be saved over the next 4 years
- ▷ Universities await the outcome of the Browne review of higher education to determine their funding. This could have a significant knock-on effect on science
- ▷ The separate universities research fund is isolated and protected from the Browne review within the ring-fenced science budget
- ▷ Capital spending is also uncertain, but funding for projects such as the new UK Centre for Medical Research and Innovation will continue as planned



Savings of seven per cent are viewed as painful but survivable by the majority of those on the sharp end, and could be seen as a mere paper cut if the budget can be met simply by stripping away red tape that is currently driving up the administrative costs of research.

Minister for Science David Willets and Minister for Business Vince Cable clearly fought hard to resist the 20–30% axe which is falling elsewhere. The Treasury was likely won over by evidence of the propensity for R&D to stimulate growth in the economy. Whilst we would do well to remember this for future debates, science must also remain independent from economic concerns – jobs and wealth are serendipitous by-products of the scientific machine, not end points.

Willets and Cable, lauded though they are, ultimately owe their political punch to you the scientific community. The 35 000 signatories to the *Science is Vital* petition, and the 2000 scientists who marched outside the Treasury on the *Science is Vital* rally showed the extent of the public support for protecting the science budget.

Nurses' News

► September saw the launch of the new style Endocrine Nurse Update (ENU) in Stratford upon Avon. The aim of the ENU is to provide an opportunity for us all to meet, establish contacts, and share knowledge, experience and ideas. From the feedback we received this was a great success, with the delegates praising both the content and delivery of the programme.

We are grateful to all our speakers for their time and effort in making this so successful. We hope this is the start of a new era and that we will never have to cancel the nurse's training event again. This will only be the case if you continue to support this meeting – so thank you for your support this year and see you next year!

This edition sees another success story for one of our nurse colleagues. The report by Sue Cox shows how local initiatives can result in best practice being adopted nationally. Her work with local paramedics resulted in all ambulance services in Great Britain being able to administer i.m. or i.v. hydrocortisone to steroid-dependent patients.

By 'thinking outside the box', Sue's work has succeeded in making all of our patients safer.

Sue's story is an example of how a nurse can change practice, but I am confident that Sue's story is not unique.

These pages are your forum to share your initiatives and ideas with your colleagues, and to tell us about your own successes. Please send your articles no matter how big or small to Andrew Lowe (info@endocrinology.org) at the Bristol office for inclusion on our page.

NIKKI KIEFFER, CHAIR, NURSE COMMITTEE

Endocrine Nurse Update

Stratford upon Avon, 27–28 September 2010

► I was appointed as an endocrine specialist nurse in Bradford in July 2009. I was fortunate enough to know another endocrine nurse, Dianne Wright, but had no idea what endocrinology was, let alone what she did.

Dianne has been fantastic, sharing her vast knowledge and experience with me over the last 16 months. We have been fortunate enough to attend both the 2009 Clinical Update and the 2010 Society BES Nurses' sessions. Both provided a great environment to extend my knowledge and to network with fellow endocrine nurses from around the country.

As I am keen to undertake the certificate of adult endocrine nursing, when Dianne heard about the update event she quickly nominated us both to do a talk on Vitamin D deficiency. Dianne would give an overview of the condition and I would present a case study. Having not presented for a few years this was initially a very daunting task. However, I soon found a case study and quickly had my presentation and abstract prepared.

The day arrived and Dianne presented first – surprisingly I was more nervous for her than myself. Following her presentation I took a deep breath to deliver the presentation I had prepared months ago and rehearsed numerous times. I can honestly say it was a great feeling: it was good to know the audience were supportive and that I was among friends.

The event was a huge success. As a relatively new endocrine specialist nurse I found the whole programme very beneficial. I was able to understand all the lectures and apply them to our clinical practice in Bradford. Both Dianne and I feel this event provides an excellent opportunity for new and experienced endocrine nurses alike. We look forward to next year, and I may even volunteer to present again!

NICOLA ELLIS, BRADFORD ROYAL INFIRMARY

► The venue for the 2010 Endocrine Nurse Update provided my first visit to Stratford upon Avon, which is a beautiful town steeped in history and culture; from the enjoyable evening boat trip, I learnt this was the birth place of William Shakespeare.

As an endocrine specialist nurse who works alone, it was great to meet other endocrine nurses to share ideas and experiences. There were also opportunities to enhance existing knowledge and to be updated on the latest research. This will greatly assist with developing our department's nursing service.

The comprehensive programme this year included everything from the pituitary to the adrenal glands, and vitamin D deficiency to thyroid eye disease. Most useful to my practice were presentations by Abd Tahrani on Conn's syndrome and Trevor Howlett on hypoadrenalism, particularly on the subject of synacthen tests versus insulin tolerance tests (ITT).

The conventional 250 mcg synacthen test has been used in my Trust as a simple alternative to the ITT; however, following explanation of why the ITT is the gold standard for assessing the integrity of the hypothalamo–pituitary–adrenal axis, I was able to question this practice.

Newly introduced presentations on how to do a case presentation, write an abstract and present a poster were very useful. The session on presenting a poster was a real eye-opener with practical tips on how to make it clear and concise.

Thank you to all involved in organising this year's event and I look forward to seeing you all again next year!

SANGITA SHARMA, NORTHWEST LONDON HOSPITAL NHS TRUST

Pre-hospital management of adrenal crisis

► In 2005 I started a project on how an adrenal crisis is managed before patients get to hospital. One of our patients had suffered a cardiac arrest with no history of cardiac issues before or since – the only issue was an upset stomach which prevented toleration of oral medication.

The ambulance crew at that time were unable to administer i.m. or i.v. hydrocortisone; indeed, they had been instructed not to by the A&E doctor, despite the patient very clearly stating her needs.

I felt this situation should not have arisen and after some audit work I presented my findings to the medical advisory group of what was then the Westcountry Ambulance Service.

They could see the potential benefit to patients so, over the course of the next year, treatment pathways were devised, education delivered and paramedics authorised to use hydrocortisone in patients who are steroid-dependent for a trial period in my hospital's catchment area.

This work gave the paramedic greater control to manage such events. Run-in times can be up to an hour if helicopters are not available: early intervention with hydrocortisone for steroid-dependent patients can be the difference between life and death.

The scheme proved successful so, after further discussions with the medical advisory group, it was rolled out across the entire Westcountry Ambulance area – Devon, Cornwall, the Isles of Scilly and parts of Somerset. With mergers this eventually became South Western Ambulance Service, giving an active area of around 18 000 square kilometres, covering a resident population of 2.5 million and a transient population of around 17 million.

I was busy providing training to paramedics when the Chair of the medical advisory group decided to take the scheme to the Joint Royal Colleges Ambulance Liaison Committee (JRCALC), in order to try and change national policy. This was a timely event as the Addison's Disease Support Group (ADSHG) and Pituitary Foundation had also been making submissions to improve the management of adrenal crisis. We succeeded in authorising the use of hydrocortisone for all ambulance services in Great Britain.

Five years on and the use of hydrocortisone in the pre-hospital management of adrenal crisis has been a resounding success in my area. Patients are 'flagged' on ambulance systems so crews have prior warning when attending a patient, patients feel safer and paramedics are more able to manage adrenal crisis successfully.

SUE COX, SOUTH DEVON HEALTHCARE NHS FOUNDATION TRUST



► When I qualified as a paramedic in 2004 I knew nothing about patients who experience adrenal crisis. I was working a nightshift not long after qualifying when I received an emergency call to a patient who had Addison's disease and was going into crisis. Both my crewmate and I knew nothing of this condition, so we had to phone a local A&E for advice. The doctor there advised us on the use of i.v. hydrocortisone (at the time outside of guidelines) and asked us to bring the patient to them. This sparked an interest for me. I looked into what causes this condition and how it is managed, and decided to do a case-study for my CPD portfolio.

When the new guidelines for the management of pre-hospital adrenal crisis came out we had extensive training. I was surprised to find out how many patients in our local area lived with the condition and how life threatening it can be. I was also surprised at how crucial our early intervention and recognition of adrenal crisis can be. Now when we are called to a patient in adrenal crisis the condition is flagged up on our incident details. This is great for us because it provides prior warning on the potential problems we may face.

Recently, I was called in a Rapid Response Vehicle to a young girl who has Addison's disease and was in possible adrenal crisis. As her condition was flagged up I was able to gain an accurate history and recognise that she was ill because of her Addison's disease. I treated her initial hypocalcaemia, gained i.v. access and administered i.v. hydrocortisone, so that when the ambulance crew arrived she could be taken to hospital immediately.

Now that these guidelines are in place, my colleagues and I feel a lot more confident in treating pre-hospital patients with Addison's disease.

HELEN RUDALL, SOUTH WESTERN AMBULANCE SERVICE TRUST

Left to right:
Helen Rudall,
Sue Cox

Prizes and awards presented at Endocrine Nurse Update 2010

AMEND Julia Dunn Award

Judy Darwent
Helen Peacock
Sarah Revesz

ENU 2010 poster prizes

– joint first place:
Diana Mantripp
Kathy Powell

THE ENDO TRAIN

all aboard for... **Cardiff**

'The times they are a-changin'. So wrote Bob Dylan, and whilst the context may be quite different to the spirit of political upheaval evident in Dylan's 1963 classic, the words have an equal resonance to Cardiff in 2010, where major changes to the endocrine department are afoot.

► Endocrinology first came to prominence in Cardiff under Professor Reg Hall's leadership in the 1980s, when he established Cardiff as an internationally acclaimed centre with a particular expertise in disorders of the thyroid and pituitary. These interests were pursued by two of his protégés, Maurice Scanlon and John Lazarus, who became leading lights in their own right in these disease areas. Their recent retirement thus leaves us with some big holes to fill. Should passengers travelling to Cardiff on the Endo Train be concerned that it might derail?

The research environment

Cardiff University School of Medicine is one of the largest in the UK, based at the main teaching hospital site at the University Hospital of Wales (UHW). Research within the School of Medicine is focused on five interdisciplinary themes: infection, immunity and inflammation (or 'i3'); clinical epidemiology; cardiovascular sciences; cancer studies; and the MRC centre for neuropsychiatric genetics and genomics.

Researchers in endocrinology interface with each of these units and form the core of the cellular and clinical metabolism development group. This thematic organisation is underpinned by a series of exciting structural developments designed to support the requirements of a broad range of research activity. These include the state-of-the-art Clinical Research Facility, the Institute of Medical Genetics, and the Wales Research and Diagnostic PET Imaging Centre, which incorporates an on-site cyclotron, radiopharmaceutical research and production laboratories, and pre-clinical in addition to clinical scanners. This complements world-class MRI and magnetoencephalography (MEG) facilities at the Cardiff

University Brain Research Imaging Centre (CUBRIC) and takes Cardiff into the forefront of medical imaging technology. The research philosophy at the School of Medicine is very much 'bench to bedside', reflected in the establishment of an MRC-funded translational research collaboration with Bristol University, the Severnside Alliance for Translational Research (SARTRE).

Our own recent research focus within the Centre for Endocrine and Diabetes Sciences (CEDS) relates to the control of cellular differentiation (cell fate) and function in adipose and other tissues derived from common mesenchymal stem cells. In parallel with the laboratory theme, our clinical research focus relates to the measurement and modification of vascular and metabolic risk in endocrine disease models. In collaboration with colleagues in the Wales Heart Research Institute and department of Medical Physics we use established (pulse wave analysis and velocity, carotid intima media thickness) and novel (pulse wave intensity, ventriculo-arterial coupling, tissue Doppler echocardiography) non-invasive techniques to assess vascular function and adipose tissue mass/activity (abdominal bioimpedance, DEXA, abdominal CT, 18F-FDG PET) in a number of endocrine models of cardiometabolic risk.

Notable recent successes include a Wellcome Trust award to John Lazarus for the controlled antenatal thyroid screening (CATS) study, which seeks to establish whether screening for hypothyroidism in pregnancy and treatment with thyroxine decreases the incidence of childhood intellectual impairment, and to Marian Ludgate for her studies on the TSH receptor and body composition. John Gregory has also been successful in securing funding from the NIHR and Diabetes UK for 2 large clinical trials examining outcomes in childhood onset diabetes, in collaboration with colleagues at the South East Wales Trials Unit (SEWTU).

The clinical service

There are two teaching hospitals located in Cardiff: the UHW and University Hospital Llandough (UHL). All endocrine care is delivered at the main UHW site. In addition to serving the local population of Cardiff and the Vale of Glamorgan (535 000), the endocrine team in Cardiff provide multidisciplinary specialised services on a tertiary 'all Wales' level for patients needing pituitary surgery, ably led by Ravi Nannapaneni, for neuroendocrine tumours or inherited endocrine tumour syndromes.

In addition to my own contribution, the endocrine service is delivered at consultant level by Steve Davies, supported by Kuvera Premawardhana as the thyroid lead, with contributions from Aled Roberts and Hemanth Bolusani. We are fortunate to have wonderful support from our endocrine surgery colleagues: David Scott-Coombes has continued to build on the excellent

University
Hospital Wales



foundations laid by Malcolm Wheeler, and has recently been joined by Michael Stechman from Oxford. We are also fortunate to have strong links with our paediatric endocrine colleagues, Professor John Gregory and Dr Justin Warner, who link with us formally on a quarterly basis to deliver a transition endocrine clinic.

Cardiff was one of the founding centres of the European Graves' Ophthalmopathy Group (EUGOGO) and our combined thyroid eye disease clinic continues to thrive, lead by our orbital surgeon Carol Lane who has recently been joined by Dan Morris from Newcastle.

Training in endocrinology

There are presently 24 specialist registrar (SpR) posts in endocrinology and diabetes in Wales. Most SpRs spend the first 3 years of their rotation working in District General Hospitals, later moving to the UHW for more specialised endocrinology training. Whilst at the UHW SpRs benefit from, and contribute to, weekly case-based discussion meetings, a rolling audit programme and co-supervision of undergraduate medical student projects. Training 'in house' is supported by a series of bi-monthly all-day meetings which are compulsory for all endocrinology and diabetes SpRs in Wales. This 5-year rolling programme seeks to cover all aspects of the new specialty training curriculum for endocrinology and diabetes.

The development of clinician scientists is also a major priority. The postgraduate medical school and major universities in Wales, in association with the Welsh assembly government, have designed the Wales clinical academic track (WCAT) lectureship scheme as a run-through academic programme for the most able and promising candidates. This eight year scheme aims to equip trainees with the range of knowledge and skills needed to compete as independent investigators in the modern area of translational research. Each WCAT lectureship provides training from entry (usually at ST2 or above) through to competency based CCT and includes a fully funded full-time 3-year PhD training fellowship.

The WCAT scheme complements the clinical research fellow (CRF) programme at Cardiff and Vale university health board, which was introduced by Maurice Scanlon in 2002. Endocrinology has benefited significantly from this initiative, with 3 PhDs and 11 MDs awarded to our trainees since its inception.

Training for basic scientists takes place at several levels; in CEDS higher degree candidates receive one-to-one tuition in all aspects of cell and molecular biology.

The future

It is with great excitement that we welcome the arrival of two new Professors into the department together with their research teams. Colin Dayan arrives from Bristol to take over as Head of CEDS and Professor of Clinical Diabetes and Metabolism to pursue his interests in the immunotherapy of type 1 diabetes and thyroid disease. His particular interest in understanding the impact of inter-individual variation in thyroid hormone levels on key biological outcomes (e.g. growth, neurodevelopment, cardiovascular disease) in large datasets will find a welcome home in Cardiff, not least with our ambition to extend the genotypic and phenotypic characterisation of the CATS mothers and



The research team at the Centre for Endocrine and Diabetes Sciences

their children (CATS2). He will shortly be joined by his colleague Susan Wong who will take up her post as Professor of Experimental Diabetes and Metabolism to pursue her interests in the pathogenesis and immunotherapy of type 1 diabetes. Together with Colin, she will create a strong translational unit for the immunotherapy of antigen-specific autoimmune diseases from murine models to early phase clinical trials.

Time, perhaps, to heed the words of another Dylan a little closer to home and remember that research into endocrine diseases must never 'go gently into that good night'.

ALED REES



Hungry with good things

An update from
the Society's
Obesity Special
Interest Group

► Our recent symposium 'Obesity Management for the Endocrinologist' was held at the Institute of Metabolic Science, Addenbrooke's Hospital, Cambridge. The symposium proved to be a highly successful way of sharing experiences of setting up specialist obesity services, managing the primary/secondary care interface and the assessment and management of severely obese patients. These are the areas where the Society's Obesity SIG plans to play a leading role.

The rising prevalence of obesity in the UK presents a significant challenge. Given the associated co-morbidities of type 2 diabetes mellitus and cardiovascular disease, patients with severe obesity frequently come to medical attention; in many cases these patients are then referred to endocrinologists for assessment and management. At the moment there are only a small number of dedicated obesity clinics in the UK. However, with the frequency of medical problems associated with severe obesity increasing, the availability of bariatric surgery and the need for specialist care for sub-groups of severely obese patients (such as those with hypothalamic-pituitary dysfunction and those with recognised genetic causes) there is a need for us as a profession to play a leadership role in service delivery in the area of obesity.

One of our key questions is how to provide streamlined access to bariatric surgery for those patients for whom the procedure is appropriate. In particular, how do you ensure selection, equity of access and proper medical follow-up? Medically led services should play a key role in leading the development of services for severely obese patients who are seeking surgery, as they can provide comprehensive assessment, an objective overview of the risks and benefits, and follow-up for associated medical problems.

One of the main aims of the SIG is to support the development and management of collaborative research. Although several centres in the UK lead on both basic and

clinical research in the area of obesity and metabolism, it has often been difficult to connect those working in these centres with those seeing patients. One of the important roles of the SIG is to bring these groups together by forming a network which would highlight the translational research currently being undertaken to new investigators who may wish to get involved. The Health Technology Assessment (HTA) programme commissions research into the clinical and cost effectiveness of health technologies, in addition to examining the wider impact this technology can have. The definition of 'health technology' is very broad and can range from interventions to promote health, prevent disease, the use of a diagnostic test or questionnaire, drug treatments, devices and non-drug interventions such as surgical techniques.

The HTA NIHR Evaluation, Trials and Studies Coordinating Centre (NETSCC) is keen to work with the Society's Special Interest Groups to help identify key areas for future research calls and we expect to be able to provide more information about this process in the near future. Such a network would also be particularly useful in connecting centres involved in the care of relatively rare sub-groups of obese patients so that shared experience might ultimately inform management.

I SADAF FAROOQI, JOHN WILDING

Those members interested in obesity may be interested in the following Society BES 2011 sessions:

Obesity SIG Satellite Meeting, Monday 11 April, 11:00–13:00, 'The gut–brain–fat axis and bariatric surgery'. Chaired by Simon Aylwin and Kevin Murphy.

Symposium 7, Tuesday 12 April, 08:15–10:15, 'Fat endocrinology: disorders of adipose tissue and lipids important to the endocrinologist'. Chaired by Waljit Dhillon and Amir Sam.

RCP Travelling Bursaries in Endocrinology and Diabetes Mellitus

Applications are invited from trainees in endocrinology and diabetes mellitus for Royal College of Physicians travelling bursaries. The bursaries will be awarded to trainees wishing to attend any conference on endocrinology and diabetes mellitus organised by the Royal College of Physicians, and may cover conference registration fees, standard/economy class travel and accommodation as necessary. The awards will be made throughout the year, funds permitting.

Applications should be made in writing to the Academic Vice President, enclosing a CV and giving full details of the expected costs for the event to be attended.

Academic Vice President
Royal College of Physicians
11 St Andrews Place, Regent's Park
London NW1 4LE.

Tel: 020 3075 1564, Fax: 020 7224 0719

Email: trustfunds@rcplondon.ac.uk

The Endobible: would I swear upon it?

► It won't have escaped your notice that the world wide web has gone portable on netbooks and smartphones. However, it may have escaped your notice that some useful endocrinology web portals are now available. First on the scene was www.endotext.com, providing a high quality free reference material; serving 50 000 hits a day, many would have assumed there is no market for another free online endocrine reference source. However, Frankie Swords and colleagues have created a niche with www.endobible.com. What are the advantages of these websites? Here four clinical trainees put *endobible* to the test ...

First impressions

At first glance *endobible* presents the reader with straightforward data for the clinical setting. Written in a handbook style, the articles can be digested quickly whilst trying to put together a plan for your patient. The web layout is simple to navigate, smart and easy on the eye. This is difficult to achieve: many other sites present their content in a much less intuitive manner.

So it looks good, but what about the content?

Endobible doesn't pretend to be a textbook with all nuances covered. Articles are brief, to the point and refreshingly devoid of references peppering the text. There are plenty of facts presented; first impressions are of a prescriptive list of questions to ask, signs to look for, and tests to order. This site can assist in busy clinical situations by allowing you to focus on why these questions are important and what these tests are attempting to uncover.

In contrast, *endotext* provides a much more in depth look at the epidemiology and pathophysiology of endocrine conditions, as well as the clinical aspects of presentation, investigation and treatment. *Endotext* does not necessarily help you manage the patient: it is not easy to find the information you need in *endotext* in a clinical setting unless you have used the site a great deal beforehand. This then, is the advantage of *endobible*: by lacking the minutiae of an encyclopaedic resource it can offer instant access, breadth of coverage and practical information such as which drugs a patient must stop in the week before the test.

Who can benefit the most from *endobible*?

Most specialist registrars and senior trainees would (we hope), know most of the content; *endobible* then, is ideal for junior level trainees, foundation and senior house officers who need a brief, basic guide on patient management, and some prompting on which questions to ask in history taking. *Endobible* is also ideal for the general physician, especially those who lack familiarity with endocrine conditions.

What can't it do?

A guide like this cannot be universal or completely comprehensive. Protocols for endocrine tests vary widely across the country and the protocols in *endobible* are not



necessarily to your local Professor's taste. The coverage of dynamic function tests, for example, deliberately does not attempt to describe how to interpret such tests, pointing out that detailed interpretation is beyond the scope of the guide. While *endotext* has a section on test interpretation, much of the information is not strictly relevant if attempting to make an instant interpretation of a specific test. This then, is perhaps the point: many ST3 and ST4 trainees will be working in hospitals which do not routinely perform complicated dynamic function tests, and those who do will usually have their own hospital policy to refer to when organising the tests. The interpretation of the most complicated of these is not something best left to the last minute.

When do I use it?

The nature of our specialty demands trainees who are very good at running outpatient clinics. Recent changes to medical training have meant that core medical trainees are attending fewer outpatient clinics than in the past. In many cases the first clinic an ST3 attends can be their first clinic ever.

The purpose of an outpatient clinic is to provide a service to the patient and provide clinical experience and training for the registrar. Time constraints mean that a long discussion of each case with the consultant is not possible, and would still require the correct questions to have been asked in the patient history. *Endobible* provides a means of planning in the few moments before the patient enters clinic. Afterwards, the trainee's new knowledge can be consolidated in a discussion with the senior, reading a resource such as *endotext*, or other sites such as www.uptodate.com.

All in all, www.endobible.com deserves a bookmark as a useful tool ... we wish it had been available when we started doing endocrine clinics!

ABD TAHRANI, ALIA MUNIR, DOMINIC CAVLAN, JYOTHIS GEORGE

Reunions gather pace whilst memories fade

► I live in a quiet country village with a nice pub, the Nags Head. Having remarried in the third age of life, I decided to find out if my wife was able and motivated to share my longstanding leisure pursuit – watching sport. A short exchange of dialogue revealed the depth of the challenge:

'I am just going down to the Nags Head to watch the British Lions play the Springboks, dearest'

'Why? Are they playing in that field just behind the Nags Head?'

Some people, however, are never beaten; Horatio, Lord Nelson, the great British Admiral and popular hero was such a person. Nelson lost the sight in his right eye, contracted malaria, and had his right arm amputated after his elbow had been shattered in battle. In 1805 he succumbed to a heroic death at the Battle of Trafalgar. Most amazing of all, however, he was a chronic sufferer of sea sickness, a condition that would remain with him throughout his illustrious naval career.

Writing of the sea, I had the opportunity to cross the ocean waves recently. It was a medico-legal case and I was due to give an expert endocrine opinion on a patient outside of the UK whom I had never seen before; the case involved litigation against a local endocrinologist.

I travelled over the night before in my jeans, wore my suit jacket, and packed my suit trousers in my overnight bag.

The next morning, when I put on the suit trousers, it was clear that the zip was broken and beyond rescue. I was distraught; I begged for a safety pin from the hotel reception and set off to see my patient. I arrived first, locked myself in the clinic room, and pondered over my dilemma. It was no good, unlike Lord Nelson, my nerve did not hold, and I switched back into my jeans before the patient entered the room. I had no desire to double the number of endocrinologists under threat of litigation, nor to be remembered as 'the endocrine flasher'.



Once summer is over, the endocrine meeting season is in full swing. Recently I attended a meeting held in Prague and caught up with some old friends including Professor Z from Germany. Our first meeting was over 20 years ago. He introduced himself as Z from Homburg, Germany; he had quite a strong accent and I assumed that he meant Hamburg, Germany especially as I was unaware that a place called Homburg existed. I spent the next 30 minutes talking to him about Kevin Keegan's move from Liverpool to Hamburg and his almost telepathic football understanding with Toshack.

Professor Z although very quiet did not seem unhappy, and then Professor C walked past and over his shoulder said: 'Ah, Professor Z from Homburg, how nice to see you.'

I was dumbstruck, Professor C was a very highly esteemed, public school educated, British Professor of Paediatric Endocrinology; I thought to myself what a waste of a public school education, Professor C also doesn't know how to pronounce Hamburg! It then slowly dawned on me that there is a hat called a Homburg hat; oh dear, Homburg is a place and it is definitely not Hamburg. Even now when we meet up Professor Z and I chuckle about that first meeting although curiously the conversation never turns to football.

Speaking of reunions, for about the last 20 years I have been attending an annual weekend reunion with about 8 couples who trained together in medicine and were closely bonded from about 18 to 27 years of age.

It is enormously enjoyable and slotting into the weekend comes very naturally as one knows the others' personal histories. More and more as we realise that a very long history binds us, the reunion is suffused with great kindness.

The advance of modern technology, however, has meant that reunions are possible that do not hold the same attraction. Thus the other day my secretary told me that a man called AB had phoned; he told her that he was at primary school with me and had looked me up on Google; he decided that I had been successful in life and wished to make contact to congratulate me. To this end he left his telephone number.

I have not returned the call. I last saw him in the playground 55 years ago – he was in short trousers. Google says nothing about personal history; there are many of the last 55 years that I simply cannot remember clearly enough to record for anyone, and finally there is no bond that truly links me to AB. In other words I feel nothing.

Furthermore it sets a dangerous precedent; who will the next call be from? I anticipate that the caller will be a fellow third age traveller who states:

'I was in the same neonatal unit (modern terminology for where babies are kept) as you; in fact I was in the next cot. I remember you – lots of black curls and rather windy. So what have you done with your life?'

'HOTSPUR'

Hot Topics

Journal of Endocrinology

Journal of
Endocrinology

Novel MC4R agonists

Mutations in the melanocortin 4 receptor (MC4R) are associated with human obesity. Roubert and colleagues identified two novel melanocortin agonists which activated mutated hMC4Rs in obese adults and children *in vitro*. Different classes of MC4R mutation were important; those with decreased endogenous alpha-melanocyte stimulating hormone response showed increased binding to these agonists. As such, these novel melanocortin agonists have potential for development as anti-obesity drugs.

[Read the full article in *Journal of Endocrinology* 207 177–183](#)

PRX III in diabetes

Type 1 diabetes is caused by autoimmune destruction of pancreatic beta cells. Wolf and colleagues used the Tet-On system to over- or under-express peroxiredoxin III (PRX III), an antioxidant enzyme. After treatment with stressors, they found that PRX III protects beta cells, while reduced PRX III expression decreased basal insulin secretion. This study highlights the potential of PRX III in prevention of type 1 diabetes.

[Read the full article in *Journal of Endocrinology* 207 163–175](#)

Pregnane X in bone homeostasis

Pregnane X receptor (PXR), the murine ortholog of the steroid and xenobiotic receptor (SXR), plays a role in bone homeostasis. Azuma and colleagues demonstrated decreased bone mineral density and bone mass in PXR knockout mice. However, no changes in serum calcium or inorganic phosphate were seen. As such, PXR is a potential therapeutic target once the precise role of PXR signalling in bone is understood.

[Read the full article in *Journal of Endocrinology* 207 257–263](#)

Endocrine-Related Cancer

Endocrine-Related
Cancer

VHL in islet cell tumors (ICT)

In this study, Erlic and colleagues used two population-based registries to assess prevalence of von Hippel-Lindau disease (VHL) in patients with neuroendocrine tumors (NETs). VHL-related ICT patients were predominately female and had a lower comparative malignancy. 39% of patients with NETs had ICTs. This suggests that not every NET patient needs molecular genetic testing. However, VHL patients should be regularly screened for ICTs.

[Read the full article in *Endocrine-Related Cancer* 17 875–883](#)

Radioiodine-induced salivary gland dysfunction

Induced selective radioiodine uptake by the thyroid gland is the basis for thyroid cancer therapy. Various agents have been tested to increase radioiodine uptake in patients with deficient sodium iodide transporter (NIS). Salivary gland dysfunction is a common and serious complication of radioiodine therapy. Liu and colleagues demonstrate increased thyroidal, but not salivary gland, uptake of radioiodine in mice treated with 17-allylamino-17-demethoxygeldanamycin (17-AAG).

[Read the full article in *Endocrine-Related Cancer* 18 27–37](#)

JOURNAL OF MOLECULAR ENDOCRINOLOGY

JOURNAL OF
MOLECULAR
ENDOCRINOLOGY

HDAC inhibitor potential

For cancer therapy, histone deacetylase (HDAC) inhibitors promise much. Nebbioso and colleagues demonstrated that the novel inhibitor MC1568 selectively inhibits class-II HDACs in murine F9 cells but not in human NB4 cells. This inhibition affected retinoic acid signalling, suggesting tissue-specific expression of HDACs in this signalling pathway. They proceeded to find that MC1568 specifically impairs the signalling pathway of peroxisome proliferator-activated receptor gamma.

[Read the full article in *Journal of Molecular Endocrinology* 45 219–228](#)

ERR α and osteoclasts

The orphan nuclear receptor ERR is proposed as a modulator of estrogen signalling. To determine the role of ERR in osteoclast biology, Bonnelye and colleagues knocked down ERR activity in the RAW264.7 monocyte-macrophage cell line. Their data show that the impairment of ERR function does not alter osteoclast precursor proliferation or differentiation but does alter the adhesion/spreading and migration capacity of mature osteoclasts.

[Read the full article in *Journal of Molecular Endocrinology* 45 365–377](#)

Clinical Endocrinology

CLINICAL
ENDOCRINOLOGY

Using FRAX in osteoporosis

Decreased bone mineral density in osteoporosis increases bone fracture risk. FRAX is an algorithm which estimates fracture risk and is used alongside the National Osteoporosis Guidelines Group (NOGG) to guide treatment decisions. In their retrospective analysis of 288 patients, Crabtree and colleagues compared FRAX-NOGG assessment with decisions made by UK physicians. They found that there was high concordance between FRAX-NOGG and clinician-determined outcomes.

[Read the full article in *Clinical Endocrinology* 73 452–456](#)

TBI pituitary abnormalities in children

Traumatic brain injury (TBI) is documented to cause hypopituitarism in adults, but the rates reported have varied greatly. Using a retrospective study Khadr and colleagues investigated whether similar post-traumatic pituitary dysfunction is seen in children. Only minor pituitary hormone abnormalities were observed in 39% of subjects, none of which were clinically significant.

[Read the full article in *Clinical Endocrinology* 73 637–644](#)

Nonpituitary sellar lesions

While pituitary adenomas are the most common lesions in the sellar region, a significant minority are not pituitary adenomas. In this retrospective case study, Valassi and colleagues assessed the prevalence of sellar masses in a large series of patients from one centre over a 10 year period. They go on to detail the clinicopathological factors that may aid a preoperative differential diagnosis.

[Read the full article in *Clinical Endocrinology* 73 798–807](#)



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Warnings and Precautions Tostran® should not be used to treat non-specific symptoms suggestive of hypogonadism if testosterone deficiency has not been demonstrated and if other aetiologies responsible for the symptoms have not been excluded. Tostran® is not indicated for treatment of male sterility or sexual impotence. Prior to initiation of therapy, all patients must be examined to exclude a risk of pre-existing prostatic cancer. Careful and regular monitoring of breast and prostate must be performed. Testosterone

may accelerate the development of subclinical prostatic carcinoma and benign prostatic hypertrophy. Oedema with or without congestive heart failure may be a serious complication in patients with pre-existing cardiac, renal or hepatic disease. The treatment must be discontinued immediately if such complications occur. Testosterone may cause a rise in blood pressure and Tostran® should be used with caution in men with hypertension. Tostran® should be used with caution in patients with ischemic heart disease, epilepsy, migraine and sleep apnoea as these conditions may be aggravated. Care should be taken in patients with skeletal metastases due to risk of hypercalcaemia/hypercalcuria. In diabetic patients, the metabolic effects of androgens may decrease blood glucose and therefore insulin requirements. Patients who wash in the morning should apply Tostran® after washing, bathing or showering. Avoid the potential for transfer of testosterone from the patient to another person by careful hand washing and the wearing of loose clothing after the gel has been applied and has thoroughly dried. Bathe or shower before any close contact with another person. Particular care must be taken to prevent transfer of testosterone to pregnant women or children via skin contact.

Interactions When androgens are given simultaneously with anticoagulants, the anticoagulant effect can increase and patients receiving anticoagulants require close monitoring of their INR. Concurrent administration of testosterone with ACTH or corticosteroids may increase the likelihood of oedema and caution should be exercised.

Undesirable effects Very common (>1/10): application site reactions

(including paresthesia, xerosis, pruritis, rash or erythema); common (>1/100, <1/10): peripheral oedema, hypertension, polycythemia, increased prostate specific antigen, hirsutism, gynecomastia. Certain excipients may cause irritation and dry skin.

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M015/1091 Date of preparation November 2010