Retro Reproduction
A Shakespearean perspective

PLUS...
On the road with a rep
Campaigning for GH replacement
Spotlight on the BTA
One of the pleasures of reading *The Endocrinologist* is the opportunity to see the world from different perspectives.

In this issue, we cover a broad range, from a day in the life of John Dawson, a Senior Territory Manager for Ipsen, to the life of the all-night biochemist, described by Penny Clark. John’s philosophy is his trademark, as he tells us ‘The key to success is to develop a mutual respect and trust with customers, building relationships that ensure confidence’. Read more about his life as a representative on page 8. Penny encourages us to remember that scientists in NHS labs are like kids with new toys. As she says on page 9, soon we will all be using point of care testing, with TSH being measured at the patient’s side.

On page 7, Pat Kendall-Taylor provides the second in a series of articles focusing on the associations that make up the BES. The British Thyroid Association started as a London dining club, where iodine uptake was discussed between passing the port, but has moved on to be the national voice of thyroidologists. Pat also directs us to the patient support groups that play an increasingly important role in patient care. This subject is well illustrated by Patsy Perrin’s article on page 10, which describes The Pituitary Foundation’s submission to NICE, and is accompanied by a piece from a patient, who relates his experience of GH therapy.

For inspiration, I recommend you read the obituaries on page 5. The passing of fellow endocrinologists is always sad, but gives us an opportunity to reflect on remarkable lives - none more so than that of Israel Doniach, who taught so many of today’s clinical endocrinologists.

Finally, if you want to know how twins are conceived, look no further than Kathy Davies’ excellent account of ‘Shakespeare and Medicine’ on page 11.

RICHARD ROSS

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The Endocrinologist

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Deadline for news items for the Spring 2002 issue: 4 January 2002
Please send contributions to the above address.

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THE 5TH INTERNATIONAL CONGRESS OF NEUROENDOCRINOLOGY

BRISTOL • UK

31 August - 4 September 2002

Contact Helen Gregson at BioScientifica for details
Tel: 01454-642210 Email: ICN2002@endocrinology.org
Web: www.bioscientifica.com/icn2002.htm
New Clinical Committee Chairman

We are pleased to announce that Professor Mike Sheppard has been appointed as the next Chairman of the Society's Clinical Committee. He will take up his new role during 2002, when Professor John Wass completes his term of office.

Win a £50 book token!

Don't forget - the member who proposes the most new membership applications by 31 December 2001 wins a £50 book token. Details were given in the letter that accompanied your copy of the handbook in November. Further application forms can be downloaded from www.endocrinology.org/sfe/newmembr.htm or requested from christine.davis@endocrinology.org.

Nancy Rothwell

We would like to congratulate Professor Nancy Rothwell, who is a member of the Society, on her appointment as Chair of the UK Life Sciences Committee. The UKLSC aims to co-ordinate and advance the interests of life scientists in the areas of government policy, science education, science communication, career development, and media relations.

Members on the move...

J M Allen to Inpharmatica, London; A Baird to Sackler Institute of Pharmaceutical Sciences, London; K Chokkalingam to Kingsmill Hospital, Sutton in Ashfield; A M Gonzalez to Sackler Institute of Pharmaceutical Sciences, London; J D Johnston to University of Aberdeen; R MacInerney to Pilgrim Hospital, Boston, Lincks; G Majdic to Clinic for Reproduction, Veterinary Faculty, Slovenia; K Marshall to Royal London Hospital; F Miro to Unipath Ltd, Bedford; P R Smith to Royal Lancaster Infirmary; T Street to Secretory Pathways Lab, Imperial Cancer Research Fund, London; R M Thomas to Singleton Hospital, Swansea; D Warner to Princess Royal Hospital, Telford; F Wotherspoon to Queen Alexandra Hospital, Portsmouth.

8-12 July 2002, Reading University

The Society for Endocrinology is delighted to announce its third Summer School, a premier training opportunity!

Young Endocrinologists Introductory Day (8 July)
Molecular Endocrinology Workshop (9 July)
Advanced Endocrine Course (10-11 July)
Clinical Practice Day (12 July)

Grants of up to £150 are available to enable Young Endocrinologists to attend

Details available from Ann Lloyd in the Bristol office (ann.lloyd@endocrinology.org)
Grants for Young Endo Visits

Remember that the following grants are available for young endocrinologists to attend Summer School and the Society’s Winter meeting. To be eligible, you must be a member of the Society for Endocrinology who:
• is under 35 and no more than 6 years post-PhD/MD/MRCP
• has signed up with the Young Endocrinologists discussion list (to join, email: young-endocrinologists-request@mailbase.ac.uk).

Do you want to visit a lab to learn a technique or to carry out experiments essential to your project? The Society offers grants of up to £500 for visits in the UK or Europe, with up to £1000 for trips further afield. Apply in writing to the Treasurer at the Society’s Bristol office. You should include a brief summary of the work you propose to undertake (on one side of A4), together with a letter specifying:
(a) your destination and why you have chosen it,
(b) the date and length of your intended visit,
(c) the costs of travel and accommodation, and
(d) your reasons for requesting a grant. The letter will also need to be signed by your head of department.

Alternatively, would you like to visit a clinical department outside your Calman rotation, in order to see endocrinology practised in a different setting? The Clinical Endocrinology Trust provides up to £500 for visits within the UK, and £1000 for visits elsewhere in Europe. Apply in writing to the Treasurer at the Society’s Bristol office. You should include a brief outline of why you propose to visit a particular department, as well as:
(a) details of your destination,
(b) the date and length of your intended visit (1-2 weeks),
(c) details of cost of travel and accommodation, and
(d) an outline of your timetable. The head of your department and the head of the department you propose to visit will also need to sign the letter.

Conference Grants

Society members can apply for conference grants to attend overseas endocrine meetings after 1 year of membership. (Junior members may apply after 6 months.) Applicants must earn less than £30,000 pa (excluding London weighting) and must have attended the Society’s last annual meeting or the last BES meeting. Only one application may be made in any calendar year. The next deadline for applications is 15 January 2001, and forms can be obtained from www.endocrinology.org/sfe/grants.htm.

Endocrine Nurses News

Training course
This year’s endocrine nurse training course ‘Growth and development for the endocrine system’ was held in Glasgow and attracted 75 delegates working in all areas of adult and paediatric endocrinology. Some came from as far afield as Singapore! For several delegates this was the first training they had been able to access since starting in their post. It was deemed to have been well organised, interesting and to have provided invaluable networking opportunities. The nurse-led and practical sessions were especially well received. The vast majority of delegates reported that their educational needs had been fully met.

Committee
We would like to take this opportunity to thank Mavis Harris for the dedication she has shown in her role as Committee Chair over the past four years and look forward to her continuing support.

MAGGIE CARSON
Israel Doniach

Israel (Sonny) Doniach was born in 1911, a few years after his parents had fled Tsarist Russia at a time of persecution of the Jews. He was brought up in modest circumstances in the East End of London. All his family were gifted, and Sonny was no exception. He became an expert diagnostic pathologist, specialising in endocrine pathology. Not satisfied simply with matching a morphological picture to a diagnosis, he wanted to link the morphology to the underlying mechanism. This led him to adopt an experimental approach.

He was one of the first to investigate the properties of radiiodine when the isotopes became available, and showed that radiiodine could lead to thyroid carcinogenesis. His interest in radiation also led him, jointly with Howard Pelc, to develop and apply the techniques of autoradiography. He was particularly interested in the interaction of growth and thyroid carcinogenesis, investigating the role of growth stimulation by goitrogens in radiation-induced thyroid carcinogenesis, demonstrating the presence of TSH-independent thyroid growth in thyroid grafts, and showing that even the relatively mild growth stimulus from hemithyroidectomy increased the chance of experimental thyroid tumour development. He also showed that radiation inhibited goitre formation in the short term, and that this growth inhibition could be used as an assay for the effect of radiation.

The bulk of this work was carried out at Hammersmith. When he moved to the London Hospital he built up a very effective and happy department, and was appointed to the Chair in 1959. During his time there, he combined teaching, administration, collaboration with the endocrinologists and endocrine surgeons, and some experimental work. He had a marvellous wit - sometimes scurrilous - and delighted in family anecdotes and jokes of all sorts, but with all this intellect and humour, was self-deprecating and never self-seeking.

When he retired in 1975 his career took a new lease of life. He moved to St Bartholomew’s Hospital, set up endocrine immunohistochemistry, and entered a very fruitful collaboration with the major endocrine group headed by Michael Besser. His experience, wide knowledge and approach based on morphology and pathophysiology fitted smoothly into the endocrine jigsaw. He made and enjoyed making a considerable contribution to the overall work for over 15 years, gradually reducing his input with time. During this time he joined the Society for Endocrinology and was subsequently awarded honorary membership.

He was married to Deborah for nearly 70 years. Her own contributions to endocrine autoimmunity were immense and they made a formidable combination. Their son Sebastian is a Professor of Biophysics at Stanford University, continuing the family’s intellectual tradition. Sonny will be remembered by many endocrinologists for his intellect, humanity and as a greatly valued friend. He died in February 2001, at the age of 89.

DILLYN WILLIAMS
STRANGEWYS RESEARCH LABORATORY
CAMBRIDGE

John Eayrs

John Eayrs was born in 1913 in Mosely, Birmingham, and educated at King Edward’s High School. After a brief spell in banking and commerce, he entered the University of Birmingham’s Medical School, just at the outbreak of the Second World War. He withdrew from his course for the duration of the war, serving as a Private in the Infantry, and rising to the rank of Brigade Major.

He subsequently resumed his medical studies at Birmingham, but opted for a change to research after 3 years. He received his PhD in 1952, and, 3 years later, as Senior Lecturer in Anatomy at the Medical School, spent a year at the California Institute of Technology as a Fulbright Research Fellow. On his return, he completed his DSc and was appointed to a 6-year post as a Research Fellow of the Royal Society.

In 1962, he was appointed to his first Professorship, a Personal Chair in Neuroendocrinology. He became Fitzmurry Professor of Physiology at the University of London’s Institute of Psychiatry in the following year, and remained there until 1968, when he returned to the University of Birmingham as Sands Cox Professor of Anatomy. He remained in Birmingham until his retirement in 1977.

In a career marked by dedication to education, he sat on the Boards of Governors of many Birmingham schools, including his alma mater King Edwards. He held editorships of a number of academic and professional journals, including a period as Assistant Editor of journal of Endocrinology, and belonged to many professional societies. He was also President of the University of Birmingham and Medical School cricket clubs.

After his retirement, he settled with his wife in Upton upon Severn, Worcestershire, where a new interest in sailing saw them explore first the rivers and canals of Britain, then later those of continental Europe and the wider challenge of the Mediterranean.

When at home he occupied himself with his garden and researching family history. He died at home on 16 August, peacefully and in his sleep. He leaves a wife, Frances, three children, six grandchildren and a great-grandchild.

MARTIN EAYRS
(SON AND EXECUTOR OF THE ESTATE OF J T EAYRS)
Webspinning
Highlighting the best on the Web

ensemble genome server
www.ensemble.org
A great site for accessing the data arising from the human genome project - especially if you are well versed in bioinformatics applications. Come here for very detailed information on everything you ever wanted to know about your favourite gene! Users can obtain SNPs, expression profiles, positional analysis and protein sequences, all from one totally free site. There are excellent links to other bioinformatics resources. Useful tutorials and help pages are also provided.

services: T, D, L, S, O; strong points: Well organised; weak points: Non-geneticists may struggle to interpret some of the data; RATING: Excellent.

product finder
www.biosupplynet.com
Ever spent hours flicking through catalogues, trying to source a product? Then here's a site that should definitely be of interest to you. Users can search for the companies that provide a particular chemical, antibody, or molecular or cell biology reagent, simply by typing in the product name, or by browsing through various well-organised reagent categories. The site also provides information on suppliers of lab equipment, model organisms and companies offering customised services. A minor downside is that the site doesn't provide direct links to the company Web pages - but then cutting and pasting the Web addresses into your favourite browser shouldn't present too much of a challenge! services: D, S; strong points: Search engine, easy to use; weak points: Nothing significant; RATING: Very good.

where's the evidence?
www.ebmny.org
Help is at hand for clinicians striving to practise evidence-based medicine! This site contains both literature and tutorials to help you develop the skills that are necessary in implementing this aspect of healthcare. It also provides useful tools and links for finding, critically assessing and applying the relevant evidence. It's not fantastically easy to use, but perseverance definitely pays off.

services: T, D, L, S; strong points: Links; weak points: Hard to navigate; RATING: Good.

Cut-price Dining
www.5pm.co.uk
At this festive time of year, here's a way to relax and enjoy yourself after all that information gathering. 5pm.co.uk allows you to find local restaurants that are offering special deals to entice diners at times when their booking diaries are a bit quiet. A huge range of restaurants take part in the scheme. It's pot-luck as to what's on offer on any particular day, but it's a great way to try out new or expensive restaurants, or even to find somewhere to continue the discussions whilst at a conference.

services: n/a; strong points: Well organised and easy to use; weak points: None; RATING: Very good.

Thanks to Kevin Ahern and Genetic Engineering News. Don't forget to visit the Society for Endocrinology on the Web: www.endocrinology.org; tell us about your favourite Web site: melissa.westwood@man.ac.uk.

Travel Grants for BES 2002
UK-based young endocrinologists can apply for a Clinical Endocrinology Trust grant to attend the BES Meeting in Harrogate on 8-11 April 2002. Application forms are available at www.endocrinology.org/sle/grants.htm, or by email from info@endocrinology.org. The deadline for applications is 11 January 2002.

Hormone Group
Four new members have joined the Group's Committee: Ferenc Antoni (Edinburgh), Nick Morris (Newcastle), Tim Palmer (Glasgow) and Dave Smith (AstraZeneca). The Biochemical Society meeting at Herriot Watt University on 8-10 April 2002 will be the venue for the Group's next colloquium, entitled 'Lessons from the type II family of G-protein coupled receptors'. The Committee would welcome suggestions for meetings and colloquia from any member of the Society for Endocrinology. Further information can be found at www.biochemsoc.org.uk/groups/hormone/default.htm.

Metopirone update
Alliance Pharmaceuticals are pleased to announce that the manufacturing problems that have caused a shortfall in the supply of Metopirone (metyrapone) capsules (250mg) have now been resolved. Normal supplies should be available from December 2001. Alliance will be contacting customers directly to confirm the status of their outstanding orders, and the company apologises for the inconvenience caused.

For further information, contact either Medical Information or the Sales Office at Alliance Pharmaceuticals Ltd, Avonbridge House, Bath Road, Chippenham SN15 2BB, UK (Tel: 01249-466966; Email: info@alliancepharma.co.uk).
Spotlight on the British Thyroid Association

The BTA was formed in 1997 from the ‘London Thyroid Club’. It provides an important forum for clinical specialist doctors in the UK who manage patients with thyroid disease, and also for scientists who are researching the thyroid and its diseases in humans. Here, Pat Kendall-Taylor, President of the BTA, updates us on the organisation’s work.

Last year saw the 50th anniversary of the ‘London Thyroid Club’, with a nostalgic dinner at Quaglino’s in Soho. Such dinners were once the favoured format for meetings of this rather select group of thyroidologists, who were elected to membership only after they had presented a paper to the Club. However, any members joining the BTA of the 21st century will certainly find a lot more action than ‘passing the port’!

Our membership spans a wide range of disciplines. Alongside endocrinologists, there are surgeons, pathologists, oncologists and biochemists, as well as non-clinical scientists. Anyone may apply for membership, but applicants need to provide evidence of an active interest in the thyroid, and must have two sponsors who are members of the BTA.

The Association’s annual scientific meeting usually takes place in London in November. Oral communications and posters are often accompanied by a symposium with invited speakers, and an overseas lecturer. In addition, the BTA is a major participant in the annual BES meeting in the Spring, where it sponsors one of the plenary lectures, given in memory of Ros Pitt-Rivers (a British thyroidologist who made a huge contribution to thyroid research in the discovery of T3). This lectureship provides an opportunity to invite an international speaker of outstanding repute. Anyone who was at BES 2001 will recall Wilmar Wiersinga’s superb lecture on thyroid eye disease. All BTA meetings are open to non-members, and we do hope that members will encourage their trainees, be they SpRs or research assistants, to attend.

The BTA is associated with the British Thyroid Foundation (BTF) and Thyroid Eye Disease (TED). These are both patient-led charities set up for the support and education of patients suffering from thyroid disease, along with their families. The BTF now handles our membership, which is to the advantage of both organisations: there is a reduced rate for BTA members who also join the BTF; and, since BTF is a charity, this is subject to tax relief. We support the BTF and encourage our members to avail themselves of this opportunity.

I also encourage all thyroid clinicians to introduce their patients to the BTF, and to TED if relevant. These organisations provide a very useful service, including many information leaflets and a personal question and answer service, with which BTA members help. Our patients are always keen for more information and better communication, so the BTA recommends that all thyroid clinics should have and use a supply of BTF leaflets.

The thyroid, and particularly the treatment of hypothyroidism, has become very topical of late, with much press coverage. There are some very active proponents of a policy of treating people with rather vague symptoms (possibly suggestive of hypothyroidism) with thyroid replacement, without the need for biochemical confirmation of the diagnosis. Consequently, the BTA receives many requests for articles, comments, press releases, talks and so on. Numerous Web sites are devoted to this issue, some of which seem to be most convincing but are misleading. These need to be monitored, and action taken if and when appropriate. Look around for them on the Web, and you will see what your patients are reading!

The BTA also has an important role in the development of evidence-based national guidelines. There are currently two active groups. A multidisciplinary group has been working on national guidelines for the management of thyroid cancer. Following good progress, the guidelines should soon be available. Did you know that the outcome of thyroid cancer in this country is significantly worse than in the rest of Europe and considerably worse than in the USA? So there is plenty of scope for improvement. Individual centres treating patients with thyroid cancer will need to consider how best to implement these guidelines. The second group is addressing guidelines for the use of thyroid tests. These are also important for many reasons, not least of which is the current (ill-advised) practice of using TSH alone as the first-line test for thyroid dysfunction.

Take a look at the BTAs new Web site at www.british-thyroid-association.org for more information. It includes news, grant information and details of meetings, lists the Association’s officers and sponsors. There are also links to other sites of interest to thyroidologists and to patients with thyroid disease. Guidelines to the management of thyroid disease will be available. Membership application forms can be downloaded from the site.

Pat Kendall-Taylor

Handbook of Acromegaly

A complete and up-to-date review of acromegaly, covering all aspects of the subject and comprising contributions from many of the world’s leading researchers on the subject from the USA and Europe. This book will be invaluable for clinicians, clinical researchers, lecturers, registrars and nurses working in endocrinology and internal or general medicine.

Ed J Wass, £24.95, $49.95 (members’ price £18.75), paperback, 97 pp, ISBN 1901978117

To place your order or for further information contact:
BioScientifica Ltd, 16 The Courtyard, Woodlands, Bradley Stoke, Bristol BS32 4NQ, UK (Tel: 01454-642240; Fax: 01454-642222; Email: sales@endocrinology.org; Web: www.bioscientifica.com)
The Daily Drug Deal: life as a pharmaceutical rep

Spare a thought for the footsore 'rep' when one next contacts you for an appointment. John Dawson, a Senior Territory Manager with Ipsen Ltd, explains that there's a lot more to his job than meets the eye...

First and foremost, I should emphasise that my role is to help ensure that the correct patient receives the correct medication at the correct dose, and that clinicians are aware of any potential problems that may arise. It is certainly NOT my job to get my product used at all costs! If that were the case, not many representatives would find any satisfaction in their work. The key to success is to develop a mutual respect and trust with customers, building relationships that ensure confidence.

My background is pharmacy. My change in career direction was triggered when a medical representative came into the dispensary where I was working. I was immediately hooked, left my dispensing bench and have never looked back. In those days it was interviews, appointment, training course and out on the road, with no recognised standard of knowledge, either for the product or specialty area. Now this has all changed.

The majority of pharmaceutical companies belong or agree to adhere to the code of practice of the ABPI (Association of the British Pharmaceutical Industry). This code gives minimum standards of training and knowledge that must be achieved, which are tested by examination. Unless the new appointee has an appropriate medical, pharmacy or nursing qualification, the ABPI exam must be taken and passed within 2 years of commencing employment. The examination is quite searching, and ensures that the representative is both competent and qualified to discuss his or her products in depth with the customer.

In an interview with a customer, the product must be presented must be in an accurate and balanced way, with discussion of both positive and negative points, to enable the customer to have a comprehensive awareness of the preparation in question. In the current era of NHS activity, it is essential to recognise the value of clinical teamwork, and promotion of the product needs to be made to the whole team, adhering to the protocols of the hospital concerned.

Finance is a prime consideration, and products often need formulary approval before any prescribing initiation can take place. Approval can be a lengthy and tortuous process, taking weeks and months of negotiation, with the customer often taking a leading role.

In a typical day, I start work about 7.30 am after early morning dog walking (I am 'owned' by a border collie). The mail arrives from my company, bringing me up to date with developments, and I can also keep constantly in touch by mobile phone and email. I like to be in my first hospital of the day by 9 30am at the latest. As I work in the Trent RHA, which has a large geographical spread, this often means being on the road quite early. It is essential to plan the day's calling sequence beforehand, to ensure as little time is wasted as possible. Equally essential is planning one's first call to be where the kettle will be on, and a cup of coffee will be offered!

Much of my work is done by appointment, and the percentage of appointments to 'cold calls' is increasing. From my point of view, this is a double-edged sword. Appointments usually mean that the customer has put aside a definite period of time for my visit, but to obtain appointments in an effective chronological sequence throughout the day is a work of art, and very difficult to achieve. Some customers prefer to see representatives only if they happen to have a free period of time, and do not make appointments. Part of my success is to know when and where these times are likely to be. 'Being in the right place at the right moment' is usually aided by helpful secretaries and clinic nurses, and genuine relationships built up over a period of time.

By planning, it is usually possible for me to obtain around six definitive calls per day, with each lasting on average 30 minutes. This frequently means no time for lunch, as this can be a busy period.

After all calls have been completed, my day ends with the drive home, and dictation of the day's events and work, the tape being despatched to my head office at the end of each week. Finally, I need to plan my next day, and so my working day ends between 5 and 6 o'clock in the evening.

In my work, very few customers do not gain information from me on the whole of my territory there is only one doctor in endocrinology who avoids industry contact). At a personal level, it is important to me that my customers see me as a useful, valuable and available resource, and not just as a commercial animal! After all, it is my NHS too, and I feel that we should all work together to get the best out of it - whatever its current warts!

JOHN DAWSON

John is currently a Senior Territory Manager with Ipsen Ltd, who specialise in research into depot presentations of somatostatin analogues.
If you go down to the Lab today...

So what’s new in your routine (or not so routine) clinical biochemistry lab? You may get the same problems - ‘you’ve sent the wrong tube’, ‘the specimen was unlabelled’, ‘we haven’t received the sample yet’ - but there have been a number of significant, if painful, changes in many hospital diagnostic laboratories over the last few years.

Many labs have merged, and many biochemistry and haematology labs have had arranged marriages. The theory is that sharing of common equipment is more efficient. Underlying and driving this trend are the big diagnostic companies who spend fortunes in laboratories over the last few years. The majority of these companies are now US-based, and they are few in number.

And whilst we are on the subject, you might well ask why labs are always changing their methods and reference ranges... It’s because all bids for such instruments go out to tender as required by the EU, and they are usually leased or rented for 5-7 years. Hence the risk of new analysers, assays and reference ranges every 5-7 years. In-built pain for our clinical colleagues.

But we can certainly churn out the numbers - 10 years ago it was 200 thyroid function tests (TFTs) a week, this year it’s 300 TFTs a day. Is there anyone out there who hasn’t had a TFT? So the all-singing, all-dancing immunoassay analysers can now cope with the usual endocrine tests, tumour markers, haematinics and serology: two problems - there’s little commercial incentive to develop automated assays for esoteric analytes, but because of large scale automation and reduction in staff numbers it’s difficult to maintain the skills to run the specialised manual assays. And what happens if you can only have one analyser? Do you ‘buy’ the one that’s good at most things, but has an insensitive oestradiol assay, or do you go for the one that’s also good at most things but gives oddly high results for female testosterone? Compromise?

So if we can do more and do it faster, perhaps it’s time to rethink what is urgent. Many labs now operate a shift system of working in some form or other. By and large, the days are gone when the on-call Biomedical Scientist was called in for each individual urgent request, where urgent was equivalent to life-threatening. For many labs, the overnight person is covering the urgent, hot, warm and cold biochemistry (urea and electrolytes, liver function tests, calcium, glucose etc). The urgent work takes priority, but nowadays outpatient and GP work will also be done. What do you do about that outpatient glucose of 30 mmol/l which pops off the analyser at 2 am? Immunoassays used to take days, now some take minutes. Endocrinology’s turn will come.

But even better are the changes looming in point-of-care testing (POCT). It’s not going to be just glucose meters and blood gas analysers. We can anticipate the adventures ahead. Which test? Think of any long-term clinical condition where monitoring might be appropriate and a market will be created. Rumour has it that there is a POCT device for TSH. Such services may be primary care-based, pharmacy-based and indeed are Web-based now. You can order your own tests via the Web in the USA now, and find out what the results mean on any number of Web pages. Let’s hope that clinicians and scientists can work together to develop the necessary support structures and thus improve the services we provide.

And what about the tests for the future? Remember scientists in NHS labs are like kids with new toys. Take your analytical problems/new analytes from your research labs and visit your NHS lab. It’s fun working at the interfaces - what becomes boring for the R&D lab is the routine labs’ next challenge.

PENNY CLARK

BES 2002
21ST JOINT MEETING OF THE
British Endocrine Societies
Harrogate International Centre and Majestic Hotel, Harrogate, UK
8-11 April 2002

Plenary lecturers
PM Stewart (Birmingham, UK)
JRG Challis (Toronto, Canada)
GP Chrousos (Bethesda, USA)
R Di Lauro (Naples, Italy)
DT Baird (Edinburgh, UK)

Firm favourites
Clinical Management and
Molecular Endocrinology Workshops
Young Endocrinologists and Nurses Sessions
Oral Communications, Posters and Debate
The ever-popular ‘What would the Expert do?’ sessions

Symposia
Hormonal control of female reproduction
Recent advances in biological rhythms
Vascular risk in diabetes - genetic and environmental interactions
Differentiated thyroid cancer
Metalloproteinases and their inhibitors:
regulators of endocrine activity
Cell based therapies for treating neuroendocrine disease
Parturition and fetal stress - hormonal strategies
for ensuring life after birth

Further details available from the Bristol office
Stating the Case for Adult GH

Readers may be aware that the National Institute for Clinical Excellence (NICE) is currently carrying out an appraisal of growth hormone (GH) replacement in adults. As the only charity currently helping adults with pituitary disease in the UK, The Pituitary Foundation recently made a submission to NICE, to emphasise the importance of this therapy for patients. Here, we look at the research that supported their submission, and see how GH therapy completely transformed one patient’s life.

Preparing our submission was a daunting, but remarkable, experience. We were delighted as the replies to our questionnaire kept arriving. Of around 400 distributed to our members on GH replacement, 24% were returned on the first day, and the final response rate was a huge 78%! A further 86 were received following an article in our newsletter. Obviously the topic is very important to those concerned.

Perspectives from 360 people were included in the submission. The participants’ responses were highly motivating; there was a real consensus of views on the major benefits that GH replacement therapy (GHRT) brings:

- 83% increased energy levels
- 69% improved mood/decreased anxiety levels
- 68% improved quality of life of those around them
- 58% improved depression
- 56% improved ability to work
- only 6% with no improvement over a wide range of factors.

The 16% who had experienced the withdrawal of GHRT for a variety of reasons reported corresponding results:

- 76% decreased energy levels
- 66% decreased mood/increased anxiety levels
- 53% decreased ability to work
- 53% decreased quality of life of those around them.

The survey identified that 18% had suffered from adverse effects of GHRT, and that 30% of respondents had encountered funding problems.

A Patient’s Perspective

My name is Steve, and I am a 50-year-old acromegalic.

My treatment took the form of trans-sphenoidal surgery followed 3 years later by radiotherapy. I initially coped quite well when I returned to full-time employment. However, the tiredness I had experienced since surgery gradually became constant exhaustion. My weight steadily increased and I gained large amounts of fatty tissue, especially in the upper body. Difficulty in timekeeping and staying awake led me to find part-time employment much nearer my home.

The ‘end’ came about 2 years later - when I first experienced an overwhelming urge to lie down on the floor and sleep. I had chronic fatigue, my performance had dropped off dramatically and I was becoming unable to carry out the simplest of physical tasks.

To my surprise, my GP recommended that I gave up work for a while. Over the next 3 years, my condition steadily worsened. Any physical task became a real effort, and I had to give up housework and gardening. My weight continued to increase. I started to lose my power of concentration and suffered short-term memory problems. By early 2000, my life was a shadow of what it had been prior to the pituitary tumour.

Through my involvement with a local patient support group of The Pituitary Foundation, I realised that I shared many of the symptoms of GH deficiency. At the next visit to my endocrinologist, I asked if he would test my GH level. He was sceptical that an acromegalic had become GH-deficient, but the tests showed that my GH levels were very low. The radiotherapy had destroyed what little pituitary function I had left.

I started a 6-month trial of GHRT in late 2000. Before the trial, I had to ensure that my local Health Authority would fund the subsequent supply of GH. I was lucky to have my application accepted without any difficulty. Although I was advised that I would feel no effects for about 6 weeks, I started noticing a dramatic improvement straight away. Aside from mild side-effects in my hands and knees for a few days, I had no problems.

Since I began the treatment, I have lost over a stone and a half in weight. But the most important effect has been an incredible improvement in my mental awareness. It is only now that I can truly appreciate how terrible I had been feeling. My energy levels are increasing and I’m starting to do small household tasks again, although I have to be careful not to overstretch myself. Many patients on GHRT have told me that GH has ‘given them back their life’. I understand exactly what they mean.

I can definitely say that GHRT has made a major difference to my health. I’m sure the improvement will continue, and I will be able to regain my old life. A year’s worth of GH is costly, but I’m convinced it is a price worth paying for the increased quality of life it gives GH-deficient patients.

The Pituitary Foundation, PO Box 144, Bristol BS99 2UB (Tel: 0860-7743355). Registered Charity No 1058968. Registered Company No 3253394. Registered Office 17/18 The Courtyard, Bradley Stoke, Bristol BS32 4NQ.
Shakespeare and Medicine, Twins and Siblings: a 16th century view of reproductive biology

Kathy Davies is a key member of the Society's publications team, who readily accepts the blame for 'hassling scientific editors and referees to achieve publication targets? In her spare time she is a student of English literature, and recently took an opportunity to combine work and leisure...

An interesting fax recently caught my attention, promoting a seminar entitled ‘Shakespeare and Medicine, Twins and Siblings’, followed by a production of King Lear at the famous Shakespeare's Globe Theatre. Last year I completed a course of study which looked comprehensively at the Bard so, although my medical background is limited, I anticipated exploring the literary perspective with a lively curiosity.

For some of the speakers, the subject reflected a familial relevance, and each one directed our attention to different facets, interspersed with light-hearted scene dressings to highlight Shakespeare's fascination with twins, particularly in Twelfth Night and The Comedy of Errors.

Professor Lisa Jardine drew our attention to Shakespeare's ability to build on the ideas of his time at an emotional level. The dual phenomena of twins' intense bonding and the public's amazement caused 16th century England to regard them as contrary to the decree of nature, and therefore 'of the Devil'. Various improbable reasons for their conception were voiced, including something untoward seen by the mother when pregnant, her manner of sitting and even the wearing of clothes which were too tight!

Fraternal or non-identical twins were believed to have been fertilised by two different fathers, resulting in the destruction of the second twin to save the mother's reputation.

Twins have an intense bond, which exceeds that of siblings, illustrated in Twelfth Night as being 'inseparable to the depths of their souls' and in The Comedy of Errors as 'a drop of water seeking another drop'. We learned that in mythology, there were believed to have been three sexes, male, female and androgynous. The last of these was believed to be round, to have four hands and feet, two heads and faces, and to move by rolling over! They had the misfortune to displease the gods, who split them in two, diminishing their strength but doubling their numbers. The two halves were then continually seeking their missing partners, to regain their former complete state.

Bill Dinsmuir traced some of the history of twin studies, including their corruption in the concentration camps, where twins provided their own inherent control groups.

In more recent research, genes (nature) were found to have more effect than environment (nurture) when comparisons were made between separated twins, showing individuals in supportive, affluent families achieving the same milestones as their twins in 'dysfunctional' homes.

Possible factors influencing the formation of twins were discussed, such as the timing of the splitting of the embryo, the orientation of the twin to the maternal heart and the maelsstrom of inter-uterine life. Issues such as chimeras and cloning were also aired.

The theme of twin studies was continued by Dr Timothy Spector, especially the comparison of identical and non-identical twins, and the effect of nature versus nurture. A wide range of aspects was covered, including the relationship between birthweight and blood pressure, causes of obesity, quality of eyesight, and the effects of smoking. Appreciation of music (including pitch perception), sense of humour and even choice of occupation were seen to be primarily genetic rather than environmental.

Professor Peter McGuffin compared similarities and differences in personality between twins, from the situation of a shared or non-shared environment. Both adoptive and twin studies were explored, and an interesting glimpse into the ways doctors address patients was discussed. Pinel was said to have asked his patients, in a distinctly Freudian manner, whether 'they had suffered vexation, grief or reversal of fortune', while Eliot Slater merely commenced his diagnosis by enquiring whether or not the patient was a twin.

Susceptibility to depression in adolescents and adults was found to be due to genetics, while depression in children was linked to environmental factors. Depression had more than a chance association with adversity, and reactions to life events were sometimes due to the patients' perception of their world.

A final light-hearted sketch was staged by Professor Ken Hobbs and Dr John Bennett, as they debated opposing methods of treating patient ailments, in 'The Barber and the Quack'.

The day culminated in a Shakespearean interpretation of sibling rivalry in the dysfunctional family of King Lear. It was an unforgettable experience to sit high above the stage in the upper gallery of the Globe, which is a reconstruction of the open-air theatre from 1599. There was a great sense of participation in the whole performance as actors entered and exited spontaneously among the groundlings, who stood unsheltered from the elements, and completely vulnerable to any overflow of water or blood, which flowed copiously throughout!
A selection of reports from members who have attended recent conferences with the aid of Society travel grants.

34th International Congress of Physiological Sciences

Christchurch, New Zealand, August 2001

The lectures at the beginning and end of each day covered a wide range of topics. As each presentation gave a comprehensive overview, including up to date research, they were exceptionally useful. Our group presented four posters, which generated a large amount of interest. Discussions with other groups have resulted in new collaborations with Europe, the USA and Australasia.

NICK ASHTON

28th Meeting of the Fetal and Neonatal Physiology Society
34th IUPS Satellite Meeting on Perinatal Medicine

Auckland, New Zealand, August 2001

I presented two papers on different aspects of my research: an oral communication on 'Plasma leptin in fetal sheep during late gestation: ontogeny and effect of glucocorticoids', and a poster on 'Effects of maternal iron restriction on renal morphology in adult rat offspring'. Both generated useful feedback, and I enjoyed the chance to present my work to an international audience. The meeting was valuable and stimulating, with a high standard of presentations, and excellent opportunities to develop collaborative links.

ALISON FORHEAD

61st Scientific Sessions of the American Diabetes Association

Philadelphia, PA, USA, June 2001

The congress was based on the theme 'From Molecule to Malady', and so covered a wide range of topics. I particularly enjoyed the opening lecture, 'Growth areas for physiology', and others entitled 'What determines the timing of birth?', 'Pathophysiology of cardiovascular and renal disease: insights from human genetic studies' and 'Shaping the cortex by experience'. The posters (including the two I presented) were formally discussed. The delegates attending this session included prominent researchers, and it was very useful to hear their thoughts on my work.

GOSALA GOPALAKRISHNAN

Annual Conference of the Society for the Study of Fertility

Cambridge, UK, July 2001

Thousands of members of the international diabetes community attended. I enjoyed sessions on 'Regulation of regional fat metabolism', 'Autonomic control of peripheral metabolism' and 'Fat: building and burning it'. It was useful to be able to attend discussions centring around my own area of research, which concentrates on the regulatory mechanisms underlying the development of insulin resistance.

M J HOLNESS

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ALISON FORHEAD

The lectures on water channels, water balance, local renin-angiotensin systems, epidermal secretion and hypertension were all of interest and gave me food for thought. Discussion of the posters was particularly useful, and the fact that no talks were scheduled for this time slot meant that attendance at these sessions was good. My presentations were well received, with valuable feedback. The lectures on the Na+H+ exchanger gene family and the discovery of nitric oxide were very stimulating.

MARY SUGDEN

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SARAH PEARCE
Hot Topics

Caroline Brewer highlights forthcoming articles from the Society’s journals.

Prenatal glucocorticoids affect adults

Prenatal exposure to glucocorticoids alters fetal growth and endocrine function. However, few studies have investigated their influence on postnatal HPA function. Sloboda et al. have examined the effects of maternal or fetal betamethasone on this axis in sheep at 6 months and 1 year after birth. Injections (0.5 mg/kg maternal or estimated fetal weight) were given singly at 104 days of gestation, or repeated on days 104, 111, 118 and 125. ACTH and cortisol responses to CRH plus AVP at 6 months after birth were not affected by either maternal or fetal betamethasone injection.

However, at 1 year, a previous single maternal injection of betamethasone resulted in significantly elevated basal and stimulated cortisol levels, while administration to the fetus led to attenuated ACTH responses to CRH and AVP. The authors conclude that postnatal alterations in ovine HPA axis function reflect glucocorticoid exposure during gestation, and persist into adulthood. They speculate that this may contribute to mechanisms by which adult diseases such as hypertension and diabetes may be programmed in utero.

TRα, TRβ and thyroid function

Pituitary TSH controls thyroid hormone (TH) secretion, and is, in turn, down-regulated by negative feedback of TH on TSH gene expression. This feedback is mediated by intranuclear TH receptors (TRs). Weiss and colleagues have measured thyroid function in mice with deletions of the TRα and TRβ genes. They discovered that homozygous deletion of both genes gave serum TSH levels only slightly lower than in athyrotic Pax 8 knockout mice, suggesting that TRs are involved mainly in the transcriptional repression of TSH, and are not absolutely required in TSH gene activation. They also found that the absence of TRα alone did not cause resistance to TH, while the absence of TRβ in the presence of TRα significantly increased TH and TSH concentrations. TH concentrations increased further if one TR allele was also lost. Loss of a single TRβ allele did not significantly affect thyroid function, but concomitant deletion of TRα resulted in significant TH resistance. The authors concluded that TRβ but not TRα is sufficient for TH-mediated down-regulation of TSH, and that TRα may partially substitute for TRβ.

Gene expression in breast cancer

A relatively small number of oestrogen target genes have so far been identified in tissues or cell lines. Now, Soulez and Parker have used oligonucleotide microarrays to analyse gene expression profiles in human breast cancer cells in the presence of 17b-oestradiol and oestrogen antagonists. Quantitative RNA analysis identified differential expression of a number of genes. Novel targets included growth factors, cell cycle components, adhesion molecules, enzymes, signalling molecules and transcription factors. The most pronounced oestrogen-sensitive gene was that for the cytochrome P450-IIB enzyme, which increased 100-fold in 24 h. Expression of the cationic amino acid transporter E16, gap junction protein and IGFBP-4 was also markedly increased by oestrogens. Apart from E16 and IGFBP-4, the expression of most genes was unaffected by anti-oestrogen treatment. Further analysis of the markers will provide alternative approaches for investigation of the mitogenicity of oestrogens in breast cancer cells.

Breast cancer and ERβ

Oestrogen supports the growth of about 50% of primary breast cancers, and treatment has centred around blocking oestrogen receptor α (ERα) action using tamoxifen. Oncologists became aware of a second receptor, ERβ, in 1996, but its importance in breast cancer was doubted, as the clinical consensus was that tamoxifen responsiveness was linked to ERα.

We now know that ERα and ERβ have distinct cellular distributions, regulate separate sets of genes and can oppose each other’s actions. ERβ is now also known to be widely expressed in normal and malignant breasts, including within proliferating cells. In this review, Palmieri and colleagues summarise what is known about ERβ in normal and cancerous breast tissue, and assess the potential of ERβ-selective ligands as useful pharmacological tools to target proliferating cells. They also present part of their large, as yet unpublished, study on ERβ in breast cancer material.
Type 2 Diabetes in Practice


This is an informative, readable book, which manages to cover almost every aspect of this complex disease. As such, I believe that it will become an essential companion for all health professionals involved in the care and management of patients with this increasingly common condition. The authors not only provide treatment strategies for effective management of type 2 diabetes, but also give much of the recent evidence behind their very practical advice.

The first chapters discuss the epidemiological evidence supporting the rapidly increasing prevalence of the condition. They also cover some of the recent advances in our understanding of the underlying disease mechanisms that lead to the classification of type 2 diabetes and its associated conditions are carefully explained, along with useful guidelines for clinical management.

The subsequent chapter on the general principles of patient management will be particularly helpful for primary and secondary care groups seeking to establish integrated and multidisciplinary diabetes-care teams. More detailed, practical advice on treatment and long-term management strategies for patients with diabetes-related micro- and macrovascular disease follows. Once again, the authors provide comprehensive, evidence-based support for their recommendations, with much of the information drawn from the recent UK Prospective Diabetes Study literature. The algorithms described in the chapters on treatment will help to provide a useful reality check for all diabetes professionals whose patients fail to either achieve or sustain the defined EU Policy Group/ADA targets for glucose, lipids or blood pressure.

The authors are acknowledged experts in the field of oral antidiabetic drugs and the chapters on pharmacological treatment reflect this depth of understanding. The reader gets an excellent review of the modes of action, pharmacokinetics and usage of all the drugs that are currently available, plus an informed look at future therapies. The final chapter on insulin treatment covers all the basic principles of patient management, and also contains a wealth of advice on the impact of insulin therapy on everyday life activities like driving, sport/recreation and long-haul travel.

In summary, this is a very good book, which certainly deserves to find its way on to the bookshelves of diabetes-care groups throughout the UK.

ADRIAN J BONE

Endocrinology: An Integrated Approach


‘Case-based problem solving’ is now well established in the teaching of medicine. However, most endocrine textbooks give the scientific detail of hormonal action and then present various clinical conditions in a serial manner. This book breaks that mould, using clinical cases as a basis for introducing and explaining hormonal function, and I must say, right from the start, that in my opinion this is a very good book.

The authors need no introduction to this Society. They are both highly experienced teachers, and this shows in their presentation. For example, they have successfully tackled the old tricky problem of the balance between development of type 2 diabetes and its complications. The potentially confusing issues associated with the first, followed by the thyroid, adrenal, parathyroid, gonads, and finally the pituitary. On the whole I think this works. The presentation is clear and, at times, even witty, which is a rarity in endocrine texts. The now well-established box system of presenting detailed concepts outside the text is well-exploited and gives the book an uncluttered feel.

I really only have two criticisms. First, the chapters on reproduction start with an explanation of hormone-related disorders of genital development. I wonder whether readers who lack a grounding in gonadal function will be able to cope with these complex concepts? Secondly, the textbook admirably advertises a Web site containing many of the illustrations and a bank of questions. Try as I might, I have not been able to access this site, because of difficulties in sorting out the password. These are minor grumbles, however, because this is a good book. Will I recommend it to my students? I have already done so.

M C HARRIS
You may not realise that the Society for Endocrinology can work in partnership with other societies through BioScientifica, for example, by publishing their journals on their behalf. If you are involved with a society who currently works with a commercial publisher, consider talking to us about the potential for collaboration.

Our aim is partnership between non-profit organisations. We can be more flexible than some publishers (e.g. regarding page budgets).

Our other strengths include:

- our close contact with academics in the life sciences
- our simple and cost-effective electronic publishing service, which provides facilities comparable with most leading publishers
- experience with our own electronic journals, whose substantial usage exceeds many commercial e-publishing web sites
- the ability to work with external e-publishing services, such as HighWire
- development of an individual promotion plan for each journal, with more specific promotion of mature titles than most publishers
- our competitive prices!

Journal publishing faces a more uncertain future now than ever before. Societies may no longer be able to derive surpluses from their journals to fund their other activities. At the extreme, proposals by the NIH for all articles to be free on the web (funded by submission and peer review charges) would make a major difference. We are excellently positioned to help other societies assess the risks and plan for the future. This is true across the whole range of a society’s activities.

For more details contact:
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