

out more. Transferring patients to the local neurological centre may be OK in large cities but it doesn't work so well when the centre is 50 miles away. If we can't train and fund sufficient neurology expertise to provide for wherever the patient is admitted, then perhaps we should be arguing that it is only neurologically safe to admit them to selected places.

Conclusion

It is to be regretted that the problems in neurological service delivery in the UK have not been noted by neurology alone. The recent All Party Parliamentary Group report on Parkinson's disease (17) identifies significant inequalities in service for patients with Parkinson's disease. This group wasn't the first (3,11,18) and perhaps its stern reprimand, what it calls "a lack of leadership for

neurological services at local and national level", is deserved. A better staffed and more equitably distributed neurology could provide local and national leadership for service delivery in Parkinson's disease, as well as for epilepsy, multiple sclerosis, stroke, dementia, muscle disease and every other neurological illness.

The UK urgently needs more predominantly DGH-based neurologists. When they become available they will need to run outpatient clinics and organise around themselves teams of medical and paramedical staff to manage the acute admissions, the new outpatient referrals and the long term neurological illness in the community. In the meantime, whilst neurological expertise remains in short supply (not enough neurologists being trained, not enough money to pay for them), the UK needs

to make the most of what is available. That may mean teaching and supervising GP's and hospital doctors in neurology so that wherever the patient presents and is admitted in the UK they can be sure of competent neurological expertise and management. It may mean imposing local quotas on outpatient referrals, perhaps by condition, by age, by postcode or by GP. It may mean ensuring that, in the short term, undersupplied areas are encouraged to provide new consultant neurology posts whilst well-supplied areas are discouraged. It must surely mean that improving the neurology service in the UK becomes the first item on each ABN council agenda.

This is my opinion, admittedly shaped (or distorted) predominantly by south England DGH experience. Can anyone offer a different view and a counter-argument? ♦

REFERENCES

1. Stanton B. *Workforce planning: is there an impending crisis in consultant posts available for trainees?* ACNR 2009;9(1):20.
2. The ABN. <http://www.theabn.org/theabn/principalobjectives.php>
3. Royal College of Physicians of London. *Interim Report of the Committee on Neurology*. London 1954 RCP. London.
4. Morrish PK. *What is happening to English Neurology?* Clin Med. 2008 Dec;8(6):576-8.
5. Stevens DL. *Neurology in the United Kingdom. Numbers of clinical neurologists and trainees*. 1996 ABN.
6. *RCP Census of Consultant Physicians in the UK 2007*. RCP London.
7. Morrish P. *The changing relationship between neurology and general practice*. 2009 JRCGP in press.
8. *RCP Report on the Committee on Neurology: 1945*.
9. Hopkins A. *Different types of neurologist*. BMJ 1984;288:1733-6.
10. Langton Hewer R, Wood VA. *Neurology in the United Kingdom 1. Historical development*. J Neurol Neurosurgery and Psychiatry 1992;55 (Suppl):2-7.
11. Langton Hewer R, Wood VA. *Neurology in the United Kingdom 2: a study of current neurological services for adults*. J Neurol Neurosurgery and Psychiatry 1992;55 (Suppl):8-14.
12. *Acute Neurological Emergencies in Adults*. 2002. ABN, London.
13. *UK Neurology – the next ten years*. 2003. ABN, London
14. Ridsdale L, Massey R, Clark L. *Preventing neurophobia in medical students, and so future doctors*. Pract Neurol 2007;7(2):116-23.
15. *The National Stroke Strategy*. 2007. London. Department of Health.
16. *Living Well with Dementia: A National Dementia strategy*. 2009. London: Department of Health.
17. All Party Parliamentary Group For Parkinson's Disease. *Please Mind the Gap: Parkinson's disease services today*. 2009. London.
18. Kale R, Menken M. *Who should look after people with Parkinson's disease?* BMJ 2004;328(7431):62-3.

NEWS REVIEW

Elekta provides VMAT and radiosurgery solutions for New Jersey Health System

CentraState Medical Center (Freehold, New Jersey) has purchased two new state-of-the-art Elekta radiation therapy treatment systems, both with Volumetric Modulated Arc Therapy (VMAT). The first site in the world to have both Elekta Axesse and Elekta Infinity, CentraState will offer the most advanced cancer care available to its patients.

CentraState Medical Center, a part of the CentraState Healthcare System, currently is treating 45 to 50 patients a day – with fluctuations as high as 70 patients per day, all on one treatment unit. When the time came to add another treatment system, CentraState elected to replace another manufacturer's system and install two new Elekta systems.

One key determining factors in choosing Elekta was CentraState's desire to partner with a company that would ensure the institution would remain ahead of the technological curve. Robert Smith, MS, Director of Physics, says,



"We spent a lot of time comparing Elekta with other systems, and discovered that Elekta systems had many advantages over the competition, especially in imaging capabilities. "We'll be replacing our current IMRT techniques with VMAT," he explains. "We're looking to VMAT to increase throughput, but more importantly to reduce treatment times for our patients. That, in turn, will reduce the chance of patient movement during the treatment. We feel we can deliver a better, more precise treatment to the patient by delivering the dose in a shorter time."

**For the latest Elekta VMAT news, visit elekta.com/vmat
For further information contact Stina Thorman, E.
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*If you would your news to feature in ACNR, please contact Rachael Hansford,
T. 01747 860168, E. rachael@acnr.co.uk*

Richard Hammond opens new National Rehabilitation Centre for children with brain injuries

Broadcaster Richard Hammond paid a visit to The Children's Trust in Tadworth, Surrey on 16th July to open the charity's new residential rehabilitation centre for children with acquired brain injuries. The £7 million centre, funded entirely by voluntary donations, will enable The Children's Trust to help even more children from across the UK rebuild their lives after sustaining a devastating brain injury as a result of a tragic accident or severe illness.

Richard Hammond spent the morning meeting children, parents and staff at the Trust before the opening ceremony. He was escorted on his visit by 13 year old Chas, who stayed at the Trust for rehabilitation in 2008 after being severely injured in a skiing accident.

Having sustained a serious brain injury himself in a near fatal accident whilst filming for the BBC's Top Gear in 2006, Richard Hammond explained that the care and rehabilitation of brain-injured children was a cause close to his heart.



Richard Hammond beside The Children's Trust's new hydrotherapy pool, with Sarah, a pupil at the Trust's school, and physiotherapy assistant Helen Ganderton.

"I know only too well the challenges people face following a severe brain injury, but for a child there are extra dimensions because their brains are still developing. This amazing new building will help The Children's Trust's specially trained staff give these children the best chance of rebuilding their lives."

Andrew Ross, Chief Executive of The Children's Trust, said, "It has been wonderful to celebrate the opening of our new centre with the children, families and staff who are using it, as well as the generous individuals and organisations who have funded it. Our challenge was to design a facility for the nursing and care of children with the most complex physical, psychological and social needs without losing sight of our main purpose: to give the children a road back to normality, marrying expert care with a 'can do' attitude to disability."

For more information E.pressoffice@thechildrenstrust.org.uk

Carl Zeiss offers free colour selection for LSM 710

The explosion in the number of new fluorescent dyes has opened up exciting new opportunities for life science researchers. However, each requires the microscope system to be equipped with an appropriate excitation laser, a limitation that has greatly restricted their adoption.

According to Carl Zeiss, the answer is the new In Tune laser system, which offers free selection of laser lines in the range 488 nm to 640 nm. Together with the LSM 710 laser scanning microscope, In Tune enables performance of novel fluorescence measurements for the first time. Whatever the excitation wavelength required, In Tune matches the dye perfectly to enable their use



in intensity or lifetime imaging experiments.

The choice of fluorescent dyes is unrestricted as In Tune can be used alongside other system lasers, from near UV to far red. This is particularly important for FRET (Förster Resonance Energy Transfer) as In Tune allows the unrestricted use of new dye combinations in the green-red spectral range. With its 40 MHz pulse repetition rate In Tune is also an ideal source of excitation for FLIM (Fluorescence Lifetime Imaging Microscopy) experimentation.

For further information E.micro@zeiss.co.uk

Neupro®, the only transdermal patch for Restless Legs Syndrome

The only transdermal patch in the UK for the symptomatic treatment of moderate to severe idiopathic Restless Legs Syndrome (RLS) in adults was launched recently by UCB. Applied once-a-day, Neupro® (rotigotine transdermal patch) allows for continuous drug delivery to provide stable drug levels in the bloodstream 24 hours a day and improves symptom control day and night.

RLS may present itself as a 24-hour condition with symptoms frequently occurring during periods of rest, such as during sleep, or inactivity during the day, like long car journeys. RLS is thought to affect between three and 10% of the population to some extent, causing sensations such as tingling or prickling sensations, burning, tugging and creeping. If left untreated, in some patients RLS can cause exhaustion and negatively impact quality of life.

The goal of treatment for idiopathic RLS is symptom remission. Clinical trials, evaluating the efficacy and safety of rotigotine over a six month period in almost 1000 patients with RLS showed significant and



clinically relevant improvements in RLS symptoms compared with placebo and that the treatment was generally well tolerated. The most common adverse drug reactions reported in RLS patients treated with rotigotine were nausea, application site reactions, fatigue and headache.

"The symptoms of Restless Legs Syndrome can have a significant impact on quality of life for many people, often affecting sleep, job performance and social activities. People with severe symptoms may require lifelong treatment," said Professor Ray Chaudhuri, Consultant Neurologist, University College Hospital. "The clinical trial data show that rotigotine provides us with a new and effective option for tackling this debilitating condition."

For further information contact UCB on [T. 01753 534 655](tel:01753534655).

Carl Zeiss launches user-friendly software for Quantitative Force Measurement

The microscopic manipulation of biological specimens, individual cells and cell components is becoming increasingly common in life science laboratories. The launch of the PALM MicroTweezer Force Measurement module from Carl Zeiss which eliminates the need for additional hardware and time-consuming adjustment and calibration, means that the technique can be adopted by many more users.

The Force Measurement module not only controls the manipulation of microscopic particles with the PALM optical tweezers but also enables the quantitative measurement of forces relevant to many life science disciplines, visualising the data in real-time. The new module offers users a flexible and user-friendly interface to the software's functionality, which will enable a large degree of freedom in experimental design and test configuration.

The module also enables the use of the PALM MicroTweezers system for pure specimen manipulation as well as for position detection and quantitative force measurement. This means that direct comparisons may be made between experimental results and data from the literature. Calibration routines for the characterisation of the optical tweezers are performed automatically and archived together with all experimental data and images.

The Force Measurement module is supplied together with an FM StarterKit containing the FluidCell component, which permits fast and easy sample



preparation. The PALM MicroTweezers and Force Measurement module can be combined with various solutions from Carl Zeiss, including the PALM MicroBeam and Colibri light source.

For more information [E. micro@zeiss.co.uk](mailto:E.micro@zeiss.co.uk)

Addenbrooke's places first UK order for next generation imaging system

Addenbrooke's Hospital in Cambridge will be one of the first sites to benefit from Siemens' advanced CT, the SOMATOM® Definition Flash. The hospital has placed the first UK order for the new system which will be installed later in the year.

"As a result of this installation, we will be able to image patients at a greatly reduced dose and this will be invaluable for the people we see on a more regular basis. We are also hoping to omit one phase of the diagnostic study for some patients. This will not only alleviate dose on the individual, but enable us to make efficient use of the machine," said Dr. Ashley Shaw, Lead Radiologist for CT at Addenbrooke's Hospital. "We have continued to use Siemens for our CT services at Addenbrooke's as a result of a longstanding partnership that delivers consistently good value."



The Definition Flash will image patients alongside three other Siemens CT machines. Each system in the department is used for a range of imaging requirements including neurology and whole body scanning. The Definition Flash will support the systems already in place.

The CT also introduces a new level of image quality in Dual Energy scanning, increasing the contrast without having to apply higher radiation dose. This is achieved via a new, selective photon shield which blocks unnecessary parts of the energy spectrum. With improved separation of the two simultaneous data sets, radiologists at Addenbrooke's will be able to classify the chemical composition of tissues in routine CT studies.

For more information see www.siemens.co.uk

An acute interest in ultrasound

The Royal Liverpool University Hospital has chosen SonoSite's MicroMaxx® hand-carried ultrasound system for a range of acute medical applications, including FAST scanning, insertion of central lines and detection of aneurysms. Mr Peter Burdett-Smith, a Consultant in Emergency Medicine and Director of the Medical Division at the hospital, explained, "We first introduced point-of-care ultrasound in emergency medicine approximately four years ago, using an older SonoSite instrument. Last year we upgraded to the MicroMaxx system, taking advantage of its improved resolution to perform regional nerve blocks for manipulation of fractures and injuries. Once we became familiar with the MicroMaxx system, the straightforward controls have allowed us to quickly develop techniques for a variety of applications, and we have been



working closely with radiology colleagues to extend our use of ultrasound even further."

"Focused ultrasound for emergency medicine is now widespread, and has been incorporated into the College of Emergency Medicine's training curriculum, with the first examinations due next year. All of our senior medical staff are trained in emergency ultrasound and, thanks to SonoSite's support, we are the regional training centre for emergency ultrasound, teaching these vital skills to registrars and consultants from across the region and beyond."

For information on SonoSite courses contact education@sonosite.com. For more information about SonoSite products T. 01462 444 800, E.europe@sonosite.com