Association of British Neurologists Joint Meeting with Neurology Section, Cuban Society of Neurology & Neurosurgery

Conference details: 4-6 April 2011, Havana, Cuba. Reviewed by: Heather Angus-Leppan, Ralph Gregory and Martin Rosser, ABN.

One hundred and twenty five delegates from Cuba, 72 from the UK and one each from the USA, Peru and Spain, enjoyed a three day joint conference in Havana, hosted by the respective presidents Professors Enrique de Jongh and Martin Rosser. The delegates included several medical students and a large group of specialist registrars many of whom had received ABN travel bursaries. The conference was held at the Hermanos Ameijeiras Hospital. This is the largest hospital in Cuba with 650 beds. The building was originally built to be the national bank. Following the revolution in 1959 it was unused but with the addition of 12 further floors, was transformed into a hospital in 1982. Delegates were initially welcomed into the vast entrance hall which was originally intended to be a trading floor. The sixty posters were displayed on an elevated area at one end of the hall, while the hospital continued with its busy and well organised activities. Delegates were able to appreciate first hand the excellent health care system that Cubans enjoy. This is free to all citizens, with each primary care physician (family doctor) looking after about 120 families. This has resulted in a perinatal mortality rate, and life expectancy that is comparable with anywhere in the world.

The conference was opened by a lecture from Martin Rosser entitled Clinical Syndromes in Degenerative Dementia. He introduced the concept of ‘dementia plus’, a model we are familiar with when assessing a patient with parkinsonism. The appreciation of what clinical features an individual has, in addition to a memory deficit, enables a reliable clinical diagnosis to be made in many cases. There then followed the first of three sessions where 15 scientific papers from Cuba and the UK were all delivered in impeccable English. Highlights included a paper on presumed nutritional optic and peripheral neuropathy in Cuba and Africa by Gordon Plant. Also known as Strachan’s syndrome (pronounced ‘strawn’), the supposed nutritional deficit remains unclear. It is most likely due to a low protein, normal calorie diet, exacerbated by high energy output. (It occurred at a time when Cubans found themselves with a severe shortage of certain foods and all fuels, so the average Cuban was expending more energy on cycling and walking with less protein available). The last outbreak in Cuba ended in 1993, and similar epidemics have recently been described in Somalia, Ramon Begueria presented a paper entitled knowledge attitudes and practice toward epilepsy among adults in Havana which illustrated the same degree of ignorance within the general population that is seen worldwide. Andrew Lees and Eduardo Tolosa delivered a joint lecture on exotic movement disorders which included videos of an East European drug addict with an extrapyramidal syndrome caused by permanganate used in the preparation of ephedrone, and dopa responsive dystonia in a patient with a Park 2 mutation and no clinical evidence of parkinsonism despite a very abnormal DAT scan. The case competition was taken very seriously by the contestants, judges and audience. It was chaired by Colin Mumford in fluent ‘Spanglish’. The winner will become the subject of ABN Christmas quizzes as Cinithia

Professor Enrique de Jongh

Terroba was from Peru! She described a case of internal carotid artery dissection after ergotamine overdose. Kevin Talbot discussed the prospects of a cure for MND and Hadi Manji gave an overview of HIV neurology, which was particularly interesting for our hosts as it is infrequently seen in Cuba. Ana Anzorandia gave a presentation on clinical neurophysiology on the island. There are over 50 neurophysiology units, and more than 100 clinical neurophysiologists in Cuba functioning as an integrated network to collect data, using equipment which has been designed and built locally. There were several UK units are using the same equipment exported from Cuba. Jesus Perez-Netrall’s paper was entitled ‘Tertiary Stroke Unit Managed by Neurologists: the Cuban Experience’. He presented data showing how mortality and length of stay rates had fallen to that of well developed countries since the introduction of multidisciplinary acute stroke units run by neurologists rather than general physicians. This is despite the fact that acute units are not available due to cost, reinforcing the fact that relatively few stroke patients are helped by thrombolitics compared to good clinical care. Calixto Machado presented a lecture on the persistent vegetative state (PVS). His research had confirmed that coma, minimally aware states, and PVS were part of a spectrum rather than discrete entities. He provided evidence using quantitative EEG and MRI that several patients apparently in PVS were in fact ‘aware’ of their environment, at least at a neurophysiological level. Each day was concluded by a teaching session given in Spanish with slides and translation into English. Chris Butler, Ursula Schulz, and Roberto Guiloff gave lectures on epileptic amnesia, posterior circulation ischaemia and chronic inflammatory polyneuropathies.

The highlight was the CPC. Graham Venables bravely took on the challenge of discussing the case of a young Cuban who died after a two week history of headache, confusion and seizures. His review included piracy and the fact that walking the plank never actually happened. He successfully identified the clue that refusal for organ donation in Cuba is very rare unless there is a medical contraindication, but was distracted by the CT scan which was reviewed by neuroradiological colleagues in Sheffield as being consistent with an aneurysmal bleed. The answer was provided by Israel Borrajero the senior neuropathologist at Hermanos Ameijeiras Hospital, as fulminant haemorrhagic
herpes simplex encephalitis. Graham Venables concluded the CPC by suggesting that he would ask several of his neuroradiological colleagues to reconsider their futures.

Events enjoyed by delegates outside the conference included several concerts of Cuban and other South American music, lunch with Mojitos, and a visit to the Cuban Neurosciences Centre. Individual research units are organised so that basic research, development, production and marketing are all done under one roof. Several of the UK delegates took the opportunity of touring the island, which for Ursula involved a 1000km ride on her bicycle.

During the week, some of the British delegation visited the neurology wards, neurophysiology department and intensive care facilities of the Hospital Hermanos Ameijeiras. Professor Rosser was in his element in examining a man with frontotemporal dementia. We all agreed that neurologists share a common bond of communication transcending language barriers.

This conference brought the largest foreign delegation ever to a Cuban neurological meeting. It was a wonderful opportunity for Cuban and British neurologists to meet and share ideas, and a promising start to future interchanges.

2010 Lectures in Neurosurgical Anatomy

Details: 11th and 12th of December, 2010 at Magdalene College. Report by: Fardad Afshari and Tom Santarius, Department of Neurosurgery, Addenbrooke’s Hospital, Cambridge, UK.

Cambridge Lectures in Neurosurgical Anatomy (CLNA) are one of the unique events that take place annually over a weekend in one of the many historic colleges in Cambridge University. This two-day weekend course is open to neurosurgeons and trainees within the UK and outside. Its affordable price ($190 in 2010) and world-class neurosurgical masters and speakers make this a great opportunity for learning relevant surgical neuroanatomy:

Knowledge of anatomy is the basis of surgery and a perfect knowledge of surgical anatomy should be a life-long goal of each surgeon. It is especially true for neurosurgery where the surgical access routes are narrow, the brain and surrounding structures cannot be moved, and the consequences of a mistake disastrous.

The Lectures were initiated six years ago by Mr Ramez Kirollos and Mr Thomas Santarius both neurosurgeons in Cambridge University’s Addenbrooke’s Hospital with the aim to inspire the generation of young neurosurgeons to perfect their understanding of anatomy of neurological lesions and relevant surgical approaches. Use of three dimensional images of anatomical preparations and intraoperative situations in this course offers highly informative, time and cost effective educational experience far surpassing conventional two dimensional images of surgical preparations and in some ways even cadaveric dissections, to which, however, it best serves as a complement.

One of the other salient features of CLNA is the lectures by the invited world-renowned neurosurgical masters who present their experience as well as novel new techniques and approaches. The lecturers discuss advances and perfection of their techniques aimed at increasing the precision and accuracy of neurosurgery and improving the outcomes and safety for the patients.

Previous international invited speakers have included professors Guilherme Ribas (Sao Paulo), Hughes Duffau (Montpellier), Fred Gentili (Toronto), Robert Reich (Zurich), Evandro de Oliveira (Sao Paulo), Nicolas de Tribolet (Geneva), Ugur Ture (Istanbul) and Gazi Yasarlig (Little Rock).

2010 Lectures in Neurosurgical Anatomy

Last year’s event took place on 11th and 12th of December at Magdalene College. Following a welcome by the course organisers, Mr Ramez Kirollos and Mr Thomas Santarius, and a brief history of the college, the two-day course started off by lectures on surface anatomy of the brain followed by analysis of deeper structures including basal ganglia and ventricles. The anatomy lectures were delivered by Professor Guilherme Ribas, a leading neurosurgeon and neuroanatomist from the University of Sao Paolo School of Medicine in Brazil. Using three dimensional images and projections of some of the world-best dissection and prosections of the brain prepared in the laboratory of Professor Ribas, important topics on neurosurgical anatomy were revisited.

The emphasis was placed on anatomical identification and intraoperative orientation using the nearby structures, i.e. topographical anatomy. The ever increasing use and reliance on image-guidance in neurosurgery is paralleled by decline of the neuroanatomical knowledge. While recognising the enormous advantage of the navigational technique in neurosurgery, the Lectures aim at reversing this decline of working anatomical knowledge of neurosurgeons.

The first day of the course was ended by the annual Lectures’ dinner at Peterhouse, the oldest Cambridge college.

During the second day of the course started with a neurosurgical anatomy quiz that served as a good opportunity to revisit and revise the essential neurosurgical anatomy. Each question was then discussed by Mr Kirollos and Mr Santarius using 3D images from the acclaimed Dr Albert Rhoniton collection, donated to the Lectures by the author. This was followed by lectures by Professor Hughes Duffau, Chairman and Director of the Institute of Neurosciences of the University of Montpellier in France. In a series of exciting and mind-opening lectures, Professor Duffau delivered a great account of the management of low grade gliomas and the use of functional mapping of cortex and white matter during tumour resection. Using his own cases, he demonstrated the recent advances in intraoperative brain mapping and how they have minimised injury to crucial functional pathways. The excellent outcomes enjoyed by his patients were not only due to the surgery itself, but due to the understanding of functional anatomy emphasising the role of neuroplasticity and rehabilitation in recovery following tumour resection. In addition he highlighted the advantages of a multi-disciplinary team approach in identifying eloquent areas intraoperatively and how to tailor the surgical procedure for the patient’s specific needs.

2011 Lectures in Neurosurgical Anatomy

This year’s event is taking place on the 18th and 19th of June at Emmanuel College. The guest speakers will include Professor Guilherme Ribas from the University of Sao Paolo School of Medicine who will be delivering the anatomy lectures and Professor Jacques J. Morcos from the University of Miami, USA who will deliver the second day lectures focusing on the surgical management of skull base pathology, especially tumours and aneurysms.
We are delighted to announce three neuroscience conferences taking place in London in June and July 2011: Parkinson’s 2011, Epilepsy in Children and Stroke 2011.

Now in its 13th year, Parkinson’s 2011 (21st June 2011), in conjunction with Parkinson’s UK, is an integral meeting in the calendar of health and social care professionals involved in the clinical management of people with Parkinson’s. It is designed to provide a state-of-the-art update on current clinical developments in the field.

The main conference themes cover presymptomatic markers of Parkinson’s, current and emerging pharmacotherapies, an update on the Parkinson’s audit and clinical management of non-motor symptoms including swallowing dysfunction, speech problems and anxiety and depression.

Key speakers include: Professor Chris Hawkes, Honorary Professor of Neurology, London; Professor David Burn, Professor of Movement Disorder Neurology, Newcastle; Dr Dorothy Robertson, Consultant in Care of the Elderly, Bath.

Epilepsy in Children (23rd June 2011) presents an excellent opportunity for specialists in neurology, neurosurgery and paediatrics, as well as GPs and specialist nurses to extend their knowledge on the current issues and latest developments in the diagnosis and treatment of paediatric epilepsy.

Highlights of the conference will include reviews of the latest genetic research in paediatric epilepsy, opinions on optimal investigations to use in the diagnosis of epilepsy in children, updates on the effects of long-term use of anti-epileptic drugs and the importance of monitoring drug use in children.

Key speakers include: Professor Sanjay Sinodiya, Professor of Neurology, London; Dr Colin Ferrie, Consultant Paediatric Neurologist, Leeds; Dr Mary O’Regan, Consultant in Paediatric Neurology, Glasgow.

Stroke 2011 (7th July 2011) is designed to provide research updates into the diagnosis, treatment and rehabilitation of stroke.

Key topics will include the importance of early diagnosis and treatment of stroke, assessments of medications and interventional therapies for the prevention of stroke after atrial fibrillation, complications of acute stroke including aphasia and visual and cognitive impairments as well examinations of current and novel stroke treatments.

Key speakers include: Dr Joe Harbisen, Joint National Clinical Lead in Stroke Medicine, Dublin; Dr Matthew Fay, General Practitioner, Yorkshire; Dr Irina Savelieva, Lecturer in Cardiology, London.

For full programme and registration details, visit: www.mahealthcareevents.co.uk

We hope that you will be able to join us for these highly topical conferences, and that you will come away with updated knowledge and practical advice for your clinical practice.
Positive Steps in Parkinson’s Disease

Conference details: 4-5 March, 2011, Newcastle, UK  Reviewed by: Professor David Burn and Dr Douglas MacMahon.

The fourth Positive Steps in Parkinson’s Disease meeting, sponsored by Teva Pharmaceuticals Ltd and Lundbeck Ltd, was held on March 4–5th in Newcastle. The presentations and discussions covered all aspects of Parkinson’s disease (PD), from how clinical research can inform daily practice to practical advice for the diagnosis and management of common PD symptoms. In addition, there were interactive workshops looking at how the forthcoming changes in NHS commissioning might affect PD care, as well as insights into the patient experience. The common theme of the meeting was the need to treat the whole patient rather than just focusing on immediate symptom control and the recognition that treatment decisions in early disease can impact later disease management.

Dr Carl Clarke began the programme by critiquing recent clinical trial data. One hot topic is whether there is a benefit in initiating treatment early in the disease. Dr Clarke reported that a recent meta-analysis of the rasagiline TEMPO and ADAGIO studies and the pramipexole PROUD study found that the evidence supported a statistically significant benefit for rasagiline but not for pramipexole. He emphasised that it is up to physicians to decide whether the benefits observed are enough to change their clinical practice, and he stressed the need for longer-term studies to evaluate the cumulative benefits of early treatment on long-term disease progression. Dr Clarke then reviewed the data from the STRIDE study. Although the study did not support the early use of Stalevo to prevent dyskinesia, it did highlight how early treatment options can affect later decision-making. For example, patients already receiving a dopamine agonist were at greater risk of developing dyskinesia when Stalevo was initiated compared with those who were not. However, it is important to note that the patients receiving dopamine agonists tended to be younger and therefore already at greater risk of developing dyskinesia, and that the trial design did not support the early use of Stalevo to prevent dyskinesia. It did highlight how high treatment options can affect later decision-making. For example, patients already receiving a dopamine agonist were at greater risk of developing dyskinesia when Stalevo was initiated compared with those who were not. However, it is important to note that the patients receiving dopamine agonists tended to be younger and therefore already at greater risk of developing dyskinesia, and that the trial design did not permit matching of levodopa dose equivalents (LDE) between the two groups. Indeed, patients receiving Stalevo tended to be on higher LDE than those receiving Sinemet. The importance of dosing levels was again highlighted as Dr Clarke compared the evidence for the prolonged release formulations of pramipexole and ropinirole with their immediate release predecessors. While the data appear to favour the prolonged release formulations, especially for nocturnal problems, patients in the prolonged release studies tended to be titrated to higher doses of agonist than reported in the immediate release studies. Dr Clarke closed his presentation with the news that the large, pragmatic PD-Med study will start to release details of its first results later this year.

The next presentation moved even earlier in the course of PD where Dr Roger Barker discussed the prodromal phase. The Braak hypothesis of neuronal pathology staging is now widely used as a conceptual framework, and the idea that non-motor symptoms such as hyposmia and sleep disorganisation often develop before motor symptoms is already starting to change clinical practice – many physicians now ask about sleep problems when taking an initial patient history. In contrast, the idea that PD may be a prion disorder is still highly contested, however, studies now indicate that abnormal pathology in one cell can propagate and affect its neighbouring cells. In addition, Dr Barker stressed that drug treatments are not the only things to consider at diagnosis; increasing evidence supports the benefits of lifestyle changes. For example, it has recently been shown that exercise increases levels of BDNF, which plays an important role in supporting dendritic connections. Similarly, taking omega 3 supplements has been shown to increase levels of GDNF and provide protection against MPTP neurotoxicity in PD animal models.

Dr Paul Worth discussed the needs of patients with advanced PD. He defined this as when patients have developed troublesome motor complications that affect quality of life. Wearing-off is often the first motor complication to emerge and, in practice, there are three drug classes to consider. The dopamine agonists have been shown to be effective, but their long-term acceptability remains to be evaluated and there is increasing awareness of unwanted effects e.g. impulse control disorders. Dr Worth also discussed the role of MAO and COMT inhibitors: while the evidence for selegiline in treating advanced PD is poor, there is evidence that rasagiline is as effective as entacapone in increasing ON time and reducing OFF time. He reminded the meeting that despite the need for liver monitoring, tolcapone is now worth reconsidering in entacapone-failures before resorting to other advanced options. The presentation concluded with a discussion of the use of Duodopa in patients with refractory motor complications. Although the current trial data is not robust, Dr Worth has found that Duodopa can be very effective. However, physicians considering Duodopa will also need to be aware of the surgical complications, tube complications and replacements associated with this treatment.

Delegates were also invited to interact in parallel sessions where Dr Nin Bajaj and Ms Fiona Lindop discussed the management of...
freezing and falls, and Dr Diane Playford discussed neurorehabilitation strategies. Both presentations highlighted the advantages of building a close interdisciplinary team. For example, whereas freezing is relatively insensitive to current treatments, physiotherapists can help patients to understand how their environment affects their ability to dual task (e.g., walking and talking) and help them find strategies to avoid freezing or use cues to achieve their daily tasks. The audience interaction continued with a discussion of tremor case studies lead by Dr Paul Jarman who advised having a ‘protocol’ in mind when first examining a patient with tremor.

A systematic approach that evaluates for rest tremors, postural (looking for dystonia), movements and the ability to complete tasks such as the Archimedes spiral, often helps in the differential diagnosis between essential tremor, dystonic tremor and parkinsonian tremor. Dr Richard Genover also used case studies to promote awareness and planning for PD emergencies. This includes awareness of NMS-like syndromes for which Dr Genover advises having rotigotine patches available in MAU and ITU for acute admissions and/or using a nasogastric tube to administer PD medications and to be aware of other problems such as dopamine dysregulation (DDS) and neuroleptic-malignant syndrome (NMS). Wherever tremors were thought to be associated with PD, Dr Genover advised first excluding treatable causes, then considering DDS and DDS-like syndromes.

In the geriatric population, small vessel disease can often present as primary progressive freezing of gait and the judicious use of scans and continued follow-up can often help in the differential diagnosis. Sleep disorders are a common problem that can affect patient and carer quality of life. Dr Paul Reading used his presentation to discuss the need for to be prepared to see the full spectrum of possible sleep disorders within their PD patient population. For example, approximately 20% of PD patients will have RLS, many will have sleep fragmentation and some will have nocturia. REM behaviour disorder (RBD) is also common in PD patients (especially males) and causes recurring, often ‘explosive’ nightmares and characteristic ‘acting out of dreams’. It is now known that dopamine is a key mediator in maintaining sleep-wake cycles and that dopaminergic drugs can induce somnolence. Indeed excessive daytime sleepiness (EDS) is relatively common in PD, but the patients themselves are poor at recognising it and physicians should try to get information from spouses and carers about patients’ sleeping habits. Once a sleep disorder is recognised, Dr Reading advised considering the relationship of the problems to current treatment; RLS and other treatable causes such as sleep apnoea. He cautioned that overnight tests are not always helpful in guiding treatment options and that it is always important to tailor sleep treatments to the patient’s individual circumstances.

Continuing the non-motor theme, Dr Clare Fowler discussed the significant impact urogenitary symptoms can have on people with PD. Dr Fowler reminded the audience that early bladder or erectile dysfunction should be considered a red flag for MSA and suggested that sphincter EMG can help in the differential diagnosis between the two conditions. Whereas the urinary symptoms of MSA are treatable, they are more difficult to manage in PD and the most troublesome symptom is nocturia. It is important to note that bladder disturbances are highly associated with disease progression and will add to the overall disability of the patient. When considering the patient with urogenitary symptoms, Dr Fowler advised first excluding treatable causes, then cautious treatment with antimuscarinics that do not cross the blood-brain barrier and close communication with urologists.

Of all the non-motor problems in PD, one receiving considerable recent attention is impulse control disorders (ICDs) and Dr Iacema Leroi gave an update of work recently conducted in this area. The large observational DOMINION study conducted in over 3000 patients in the United States and Canada has recently been published and has found that 14% of patients with PD had at least one ICD, and 36% of these had more than one disorder. The study showed that patients with ICDs were generally younger and that ICDs are often associated with depression, anxiety and sleep disturbances. The types of ICD encountered in PD (gambling and hypersexuality are the most common), and patients do not generally show kleptomania or other psychiatric disorders. The DOMINION study showed that both levodopa and dopamine agonists increase the risk of an ICD, but combination therapy with both levodopa and a dopamine agonist increases the risk by 50%. Interestingly, there was little correlation between the dose of dopamine agonists or levodopa and the development of ICDs.

Professor Peter Jenner closed the meeting by bringing together many of the themes that had been discussed over the past two days. He argued that the teaching of PD in medical schools is still based on ‘dogma’ and needs updating. Young doctors coming through the system need to be aware that PD is a complex illness including motor and non-motor symptoms; that it affects both the central and peripheral nervous systems and that there are a number of clear parkinsonian subtypes which can be defined by symptoms (e.g., tremor predominant versus PIGD) and by the stage of onset. The PD armamentarium has never been so full, but physicians need to take the long-term view and think strategically at how to use the available drugs to improve the long-term management. This will mean trying to identify patients as early as possible, as well as treating them for both symptom control and the prevention of further maladaptive changes in the basal ganglia.

Participants left eagerly looking forward to the next meeting planned for 9-10 March 2012 in London.