

Professor Clive Hawkins (UHNS, Stoke-on-Trent) gave a comprehensive review of optic neuritis and its differential diagnoses.

Dr Adnan Al-Araji (UHNS, Stoke-on-Trent) presented a comprehensive review of Neuro-Behcet's, covering its pathological feature, clinical manifestations and treatment. Previous diagnostic criteria were discussed and soon to be published new diagnostic criteria and management guidelines were presented.

Saturday ended with three further interesting clinical case presentations.

Sunday began with an excellent review of the use of laboratory tests in the diagnosis and management of CNS neuro-inflammatory disorders

by Dr Saiju Jacob (Queen Elizabeth Neuroscience Centre, Birmingham). One future study to look out for was mentioned, a prospective study of screening for autoantibodies in new onset psychosis which is being planned in Birmingham.

Dr Hadi Manji (Queen's square, London), in a talk entitled, HIV and the Brain - 30 Years of an Epidemic, gave us the benefit of his vast experience and learning over the years in HIV associated neurological presentations. His take home messages were: to think of HIV in any neurological presentation, particularly inflammation or a chronic problem; a reminder that HIV serology may be negative at presentation; and to think

about CSF escape syndrome (requiring changing of anti-retrovirals to those with good CNS penetration and IRIS). For a good review of the topics covered in his talk there is an article of his in JNNP. Finally, the course ended with a few more case presentations.

Overall, this was an excellent weekend with many useful learning points and the promise of developments in the field of CNS inflammation to make it well worthwhile coming back for the 4th course in two years' time. Being a local trainee I may be accused of bias but I think all people I spoke to felt it was a well-run course with many excellent speakers and topics. Many thanks Dr Al-Araji and team! ♦

## The Third World Parkinson Congress

**Conference details:** 1-4 October 2013, Montréal, Canada. **Report by:** Professor Roger Barker, Professor of Clinical Neuroscience at the University of Cambridge and Honorary Consultant in Neurology at The Cambridge Centre for Brain Repair.



Ray Chaudhuri



Alan Parkinson Project Play



Tango Class

Following on from the success of previous WPCs in Washington and Glasgow, the third such congress took place in the autumnal sun of early October in Montréal and sought once more to bring patients, carers, medical practitioners, scientists and therapists together under one roof to discuss one condition - Parkinson's disease (PD). The ambition of the congress is to enable the dialogue and better understanding of the diseases by linking those with the condition and those seeking to help treat it at whatever level. As such the programme is an interesting mix – ranging from detailed science to live performances of patient inspired artistic endeavours. Each day began with hot topics picked from the numerous posters and was followed by plenary sessions that tackled a host of topics but which in summary covered:

- The prion like behaviour of alpha synuclein and how this may modify our thinking about disease pathogenesis and spread, as well as therapeutically;
- The genes linked to PD and how they may need to be expressed through environmental risk factors and the role, if any, of

- The extent and significance of non-motor symptoms in patients at diagnosis and through the disease course;
- The cognitive deficits seen in PD, their basis and imaging correlates and how this relates to the development of the dementia of PD;
- The new therapies being tried in PD including cell, gene and environmental / exercise based approaches;
- The importance of the patient in driving their own care and research and how this can best be achieved in the context of multi-disciplinary teams.

This was followed by a special lecture including the inaugural James Parkinson lecture delivered by Warren Olanow, who eloquently took us through the history of discovery in PD including the original videos of Hornykiewicz showing the effects of dopa in a patient with PD in the early 1960s – an experiment that could now not be done without a huge amount of paperwork and approval! Thereafter there were a collection of parallel sessions and workshops that covered a plethora of topics including protein misfolding, mitophagy and new gene / cell based

So in summary the major take home messages were:

- That PD may begin as a disorder outside of the CNS that is triggered by a misfolding of alpha synuclein which then spreads and causes pathology along neural networks through a prion like behaviour with an early synaptic pathology;
- The cellular pathology of PD involves a dynamic interplay between proteins, leading to altered mitochondrial and lysosomal function, which may create a positive feedback on alpha synuclein aggregation accelerating the disease process in some cells;
- The non motor features of PD, especially many of the cognitive abnormalities, significantly impact on quality of life and need to be better recognised, their basis defined and their treatment improved;
- The ability to treat PD through environmental and physical therapies needs to be aggressively pursued as it holds much promise and may be a very effective intervention at all stages of disease and should not be trumped by more “sexy” therapies involving genes, cells and small molecules. ♦