

Neurology Symposium

A joint RCPE and RCGP symposium held on 16 November 2011 at the Royal College of Physicians of Edinburgh

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The Neurology Symposium addressed the diagnosis and management of the more common neurological disorders encountered in primary care and allowed discussion of their differential diagnoses in more detail. It also offered an opportunity to examine the interface between the general practitioner and the hospital neurologist, in particular the current referral system.

SESSION 1 – PARKINSON'S DISEASE AND MOVEMENT DISORDERS

A video tour of commonly encountered movement disorders

An engaging, humorous and interactive video tour presented by Dr Monty Silverdale (Consultant Neurologist, Greater Manchester Neuroscience Centre) demonstrated the cardinal features of Parkinson's disease and the hyperkinetic movement disorders. This was punctuated by single sentence *aides mémoire* to the fundamental nature of movement disorders e.g. dystonia is 'patterned', chorea is 'random'.

Evidence-based treatment of Parkinson's disease

Professor David Burn (Professor of Movement Disorders Neurology and Honorary Consultant Neurologist at Newcastle University) gave a comprehensive update on the prognosis and evidence-based management of Parkinson's disease. Recently described independent predictors of mortality include male gender and lack of hand tremor.^{1,2} Clear algorithms for best motor management are currently lacking and a critical evaluation of the latest clinical trial data from STRIDE-PD (L-dopa and entacapone), ADAGIO (rasagiline) and PROUD (pramipexole) show less than promising results, though an improvement in trial design. Non-motor symptoms represent the biggest area of unmet need and disease modification remains the elusive goal.

SESSION 2 – EPILEPSY

All that shakes is not epilepsy

Dr Yvonne Hart (Consultant Neurologist, Royal Victoria Infirmary, Newcastle upon Tyne) thoroughly explored the conditions mistaken for seizures. Syncopal episodes

can present with multifocal arrhythmic jerks and head turning in 90% and 70% of cases respectively. Limb thrashing, pelvic thrusting, opisthotonus and distractibility raises suspicion of psychogenic non-epileptic seizures (PNES) but contrary to assumptions, injury can occur (dislocations and wedge fractures are normally epileptic) and PNES can arise during sleep. Rapid eye movement (REM) sleep behaviour disorder, periodic movements during sleep, concussive convulsions and the recently described immune-mediated faciobrachial dystonic seizures should also be considered.³

Sir Stanley Davidson lecture: seizure semiology – old hat or still important?

The relevance of signs in the management of the epileptic patient was emphasised by Dr Beate Diehl (Clinical Lecturer and Honorary Consultant Clinical Neurophysiologist, National Hospital for Neurology and Neurosurgery, London) both in understanding the impact of the seizures on the patient's life, but also in its contribution to seizure onset localisation. The theory of cerebral localisation, developed by John Hughlings Jackson, was integral to the original epilepsy surgery. Contemporary pre-surgical assessment has greatly advanced with modern neuroradiological, neurophysiological and neuropsychological techniques; nevertheless observation remains instrumental in formulating a hypothesis for intracranial electrode implantation in difficult cases.

SESSION 3 – COMMON COMPLAINTS

Dilemmas in dizziness

Professor Linda Luxon (Professor Emeritus of Audiovestibular Medicine, University of London and Consultant Neuro-otologist, National Hospital for Neurology and Neurosurgery, London) offered a pragmatic diagnostic strategy for this challenging complaint. Clear categories can be defined by the duration of the primary symptom, the presence of associated features and vestibular triggers alongside the basic vestibulo-ocular evaluation and the essential but often overlooked otoscopy. Benign paroxysmal positional vertigo can be diagnosed by the Hallpike test and treated simply using the Epley manoeuvre in a majority of cases. Vestibular sedatives

should be used for a maximum of 48 hours, though longer-term symptoms require a robust vestibular rehabilitation plan with physical exercise, explanation and reassurance.

Headache pearls and pitfalls diagnosis and management

Dr Brendan Davies (Consultant Neurologist, University Hospital of North Staffordshire, Stoke-on-Trent) stressed the importance of accurate diagnosis in the management of primary headache. New alternatives for the acute treatment of episodic migraine include calcitonin gene-related peptide antagonists, inhaled dihydroergotamines and portable transcranial magnetic stimulation. Insidious transformation to chronic migraine occurs in 4% of cases though a daily headache should prompt consideration of medication overuse headache. The exquisitely indomethacin-sensitive hemicrania continua should be excluded with any side-locked chronic headache. An open-access computed tomography (CT) scan is probably useful if a specific question is asked, but an open-access magnetic resonance imaging (MRI) scan is less cost-effective, increases referrals and can lead to VOMIT (victim of medical imaging technology) syndrome.⁴

SESSION 4 – REFERRAL MANAGEMENT IN NEUROLOGY

Referral management strategies in secondary care

Dr Nicholas A Fletcher (Consultant Neurologist and Clinical Director, Walton Centre NHS Foundation Trust, Liverpool) suggested that increasing demand from patients, referrer seniority, a more defensive culture, poorer neurological training and arbitrary performance targets have all contributed to the 31.3% growth in general practitioner (GP) referrals to the Liverpool Neurology Department between 2007 and 2011. Unclear referrals and re-referrals (the most common type of referral) were selectively returned accompanied with a proforma requesting clear and specific information. The brief reduction in the number of referrals following this intervention was not sustained. Referral management will continue to be a major challenge due to the lack of efficient engagement between primary and secondary care.

What factors influence GP referral patterns?

Dr David PB Watson (General Practitioner with a special interest in epilepsy, Hamilton Medical Group, Aberdeen) discussed how inappropriate referrals range from 9.6% to 34%, reflecting the lack of consensus about what constitutes an appropriate referral.⁵ Patient factors explain <40% of observed variation between practices whereas practice and GP characteristics account for only <10% of the variation. The availability of specialist

services, the increase in diagnostic procedures e.g. echocardiograms and specialist disease management e.g. pre-pregnancy counselling have all increased referrals. Specialist-led education about local referral guidelines has had the most impact on improving the appropriateness of referrals.⁶

TAKE-HOME MESSAGE

The diagnosis and management of neurological disorders are frequently regarded as complex by both primary and secondary caregivers. The speakers offered simple diagnostic strategies for common neurological presentations and reinforced the critical value of collecting a detailed history and observation. Understanding the nature and signs is essential for accurate diagnosis and management and for the appropriate referral to neurology. The recent increase in the rate of referrals requires improved communication and commitment between primary and specialist care.

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