

Neurology Symposium report

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DECLARATION OF INTERESTS The author was a member of the organising committee for this symposium.

INTRODUCTION

This symposium set out to deal with the 'bread and butter' of neurology. The topics were deliberately chosen to be of interest to general practitioners and hospital physicians alike, both of whom were represented in the large audience.

SESSION 1 TIPS FROM THE FRONT LINE

Efficient neurological assessment

Dr Geraint Fuller (Consultant Neurologist, Gloucestershire Royal NHS Trust) explained how perfecting our consultation style could improve neurological assessment. He urged us to 'shut up and listen' to the history, and use background information (such as occupation, social history and past medical history) to set the scene.¹ He stressed the importance of defining the time course of the presentation and level of nervous system involved before forming a clinical hypothesis, which could then be tested by examining the patient.²

Could it be mitochondrial?

Professor Patrick Chinnery (Professor of Neurogenetics, Newcastle University) explained that mitochondrial diseases are caused by lack of adenosine triphosphate synthesis by mitochondria due to defects in respiratory chain proteins (either due to mutations in the mitochondrial or nuclear genome). As well as reviewing the well-defined mitochondrial syndromes (including chronic progressive external ophthalmoplegia, Leber's hereditary optic neuropathy, mitochondrial encephalomyopathy with lactic acidosis and stroke-like episodes, and myoclonic epilepsy with ragged red fibres), he touched upon the broadening clinical phenotype of mitochondrial disease and the need to thoroughly investigate suspected cases with good clinical assessment (especially family history), DNA analysis and specialist investigations where appropriate (such as muscle biopsy).³

Taking neurology to the people

Dr Chris Allen (Consultant Neurologist, Addenbrooke's Hospital, Cambridge) gave a personal and humorous account of how he set up outreach neurology clinics in

the Cambridge area and the logistical challenges faced along the way (such as deciding on the location of clinics, streamlining the referral process, dealing with hospital managers and making use of wireless technology to access patients' medical history, test results and imaging). By avoiding some of the intrinsic problems of hospital clinic appointments (such as the difficulty for patients to get there and the busy clinic environment), he believed that more of his patients experienced a satisfactory consultation, which in itself often made them better if their symptoms were not due to a structural cause.

SESSION 2 COMMON THINGS ARE COMMON

Chronic daily headache

Dr Manjit Matharu (Consultant Neurologist, National Hospital for Neurology and Neurosurgery, London) cited the high prevalence of chronic daily headache in the general population (4–5%).⁴ He explained that the key to managing this condition effectively was to go back to the early headache history to define its subtype. He summarised the clinical features of the common primary headache syndromes (including migraine, tension headache, hemicrania continua, cluster headache and short-lasting unilateral neuralgiform headache with conjunctival injection and tearing) and proposed abortive, preventative and non-pharmaceutical strategies for each. He also described the importance of tackling medication misuse and the relevance of red flags (such as age >50 years, abrupt onset, worsening severity, systemic symptoms, neurological signs, presence of aura and identifiable headache triggers) as indicators of secondary headache causes.

Ischaemic stroke – prevention is better than cure

This year's Marjorie Robertson Lecture was delivered by Professor Graeme Hankey (Professor of Neurology, School of Medicine and Pharmacology, University of Western Australia, and Head of Stroke Unit, Royal Perth Hospital). His accompanying review on pages 56–63 demonstrates how stroke prevention and risk factor modification (in particular blood pressure lowering) is the key to reducing stroke incidence.

SESSION 3 DIAGNOSTIC DILEMMAS

Is this a neuropathy and what caused it?

Dr James Overell (Consultant Neurologist, Southern General Hospital, Glasgow) comprehensively reviewed the clinical classification of neuropathies. He proposed that six questions could allow targeted investigation of neuropathic disorders: What system is involved? What is the distribution of weakness? Is there any evidence of upper motor neurone involvement? What is the temporal evolution? Is there evidence of a hereditary neuropathy? What is the nature of the sensory involvement?

Does this patient have dementia?

Professor Adam Zeman (Professor of Cognitive and Behavioural Neurology, Peninsula Medical School, Exeter) outlined the approach he uses when assessing a patient with suspected dementia. This included a conversation with the patient and an informant (and both together), cognitive evaluation (ideally Addenbrooke's Cognitive Examination), mental state examination (particularly looking for evidence of depression and anxiety which can mimic dementia), activities of daily living assessment, and targeted neurological and general medical examination that may point to an alternative cause for cognitive decline (such as neuroacanthocytosis, Creutzfeldt-Jakob disease, Wilson's disease, hypothyroidism, systemic lupus erythematosus, human immunodeficiency virus infection, limbic encephalitis and obstructive sleep apnoea).

SESSION 4 WHEN (IF EVER) SHOULD YOU OPERATE ON THE NECK FOR DEGENERATIVE DISEASE?

Dr David Summers (Consultant Neuroradiologist, Western General Hospital, Edinburgh) reviewed the radiological features of cervical spine disease and warned

that open-access magnetic resonance imaging could lead to the detection of more incidental abnormalities that were not responsible for patients' symptoms.

Dr Nicholas Todd (Consultant Neurosurgeon and Spinal Surgeon, Newcastle) split the patient population into three groups. For axial neck pain, he advised avoiding surgery. For cervical radiculopathy, he highlighted the good natural history but warned that progressive motor weakness, significant functional impairment or persistent pain may necessitate an operation. He ended by suggesting that patients with cervical myelopathy whose symptoms were mild with little radiological evidence of cord compression could be managed conservatively, but that some would progress and require an operation to prevent further deterioration. The various operative approaches and techniques were discussed.

After some good-natured 'surgeon bating', Dr Richard Davenport (Consultant Neurologist, Western General Hospital, Edinburgh) dissected natural history studies and a Cochrane review before saying that there was no conclusive evidence to support surgical treatment for cervical radiculomyelopathy.⁵ However, he too agreed that some patients would ultimately go on to require an operation.

CONCLUSION

This symposium dealt with common neurological conditions. The talks were authoritative and gave sensible advice which the audience could take away to help them manage patients more effectively.

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REFERENCES

- 1 Jackson C. *Shut up and listen: a brief guide to clinical communication skills*. Dundee: Dundee University Press; 2006.
- 2 Fuller G. *Neurological examination made easy*. 4th ed. Edinburgh: Churchill Livingstone; 2008.
- 3 Chinnery PF. Could it be mitochondrial? When and how to investigate. *Pract Neurol* 2006; 6:90–101. doi:10.1136/jnnp.2006.090050
- 4 Pascual J, Colas R, Castillo J. Epidemiology of chronic daily headache. *Curr Pain Headache Rep* 2001; 5:529–36. doi:10.1007/s11916-001-0070-6
- 5 Fouyas IP, Statham PF, Sandercock PA. Cochrane review on the role of surgery in cervical spondylotic radiculomyelopathy. *Spine* 2002; 27:736–47. doi:10.1097/00007632-200204010-00011