

2664 GUIDELINE FOR MANAGEMENT OF INCIDENTALLY FOUND WHITE MATTER HYPERINTENSITIES ON MAGNETIC RESONANCE IMAGING OF THE BRAIN

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Objectives White matter hyperintensities (WMH) are a common incidental finding on magnetic resonance imaging (MRI) of the brain. Evidence has emerged supporting these lesions as portending an increased risk of stroke, cognitive impairment, dementia, and death. This commonly prompts referral to the neurology clinic and there are currently no specific guidelines. This guideline will support clinicians to implement appropriate investigation and management of incidentally found WMH.

Methods This guideline was formed by narrative review and expert opinion (14 consultant neurologists in Australia and New Zealand) sought through a modified Delphi consensus. Quality of evidence was assessed by the Grading of Recommendations Assessment, Development and Evaluation (GRADE) framework.

Results Key recommendations include the following: appropriate investigations include measurement of blood pressure, ECG, and tests for hypercholesterolaemia and diabetes mellitus (13/14 experts in favour, no GRADE assessment due to lack of data). Intensive cardiovascular risk management should be commenced (11/14 experts in favour, GRADE: very low). A systolic blood pressure target of less than 120mmHg is unlikely to result in added benefit (8/14 experts in favour, GRADE assessment: very low), and antiplatelets or anticoagulants should not be prescribed for incidental WMH in the absence of another indication (supported by 12/14 experts, GRADE: very low).

Conclusions Incidental finding of WMH on MRI represents an opportunity to screen for and address cardiovascular risk factors to prevent progression to cognitive or other neurological impairment. With this guideline such management can be provided by non-neurologist clinicians without delay in waiting for an outpatient neurology review.

2665 RETROSPECTIVE ANALYSIS OF PATIENTS SEEN AT AN AUSTRALIAN HEADACHE CLINIC

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Objectives A growing number of headache clinics exist in Australia for specialist management of complex headache disorders. Previous international data have shown that before specialist review there is low use of headache preventative treatments and high rates of analgesic medication overuse. This study aims to characterize the patients seen in an Australian headache clinic, with particular emphasis on these two issues.

Methods A retrospective analysis of all patients seen at a tertiary hospital headache clinic was completed over a four-and-a-half-year period. Data were collected from electronic medical record notes. The details recorded include patient demographics, final headache diagnosis, presence of medication overuse, previous preventer medication use, and brain imaging performed.

Results 425 sequential patients were reviewed from July 2017 to December 2021. 80% were female with median age of 44 years. 35% had not received a formal diagnosis prior to clinic other than 'headache'. The final clinic diagnosis by ICHD-3b criteria was a class 1 headache (migraine) in 91%. Medication overuse was present in 46% – most commonly with multiple analgesics (20%) or simple analgesia (18%). 41% had not trialled any preventer medication before the clinic, and 14% more had inadequate preventer trials (defined as less than 3 months use or inadequate dosage of a single appropriate medication). 91% had brain imaging pre-clinic with incidental findings in 34%.

Conclusions Significant potential exists to improve primary care headache treatment in Australia. Increased knowledge of medication overuse and first line preventer medications would be the first steps towards this.

2666 RESCUE SUBTHALAMIC NUCLEUS DEEP BRAIN STIMULATION FOLLOWING PARTIAL SECONDARY FAILURE OF GLOBUS PALLIDUS DEEP BRAIN STIMULATION FOR CERVICAL DYSTONIA-PRELIMINARY RESULTS

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Introduction Cervical dystonia is the most common form of focal dystonia in adults. Both isolated and segmental forms of cervical dystonia respond to stereotactic neurosurgical intervention with either subthalamic nucleus (STN) or globus pallidus internus (GPi) deep brain stimulation (DBS). Whilst the outcomes relating to the improvement in dystonia severity, disability and pain are comparable between GPi and STN targeting, GPi DBS can be complicated by the development of stimulation-induced bradykinesia with reports of secondary failure in dystonia control.

Case We describe the case of a 67-year-old female with a fourteen-year history of medically refractory segmental dystonia (cervical/facial/oromandibular) who underwent bilateral STN DBS insertion, nine years after initial GPi DBS surgery, due to the development of bradykinesia and partial secondary failure of dystonia control. Following the addition of STN electrodes, there was improvement cervical dystonia at one week maintained through early follow up at six weeks. GPi DBS was continued, but at a lower amplitude, with improved gait and reduced stimulation-induced bradykinesia.

Conclusion Various treatment approaches have been described for the management of secondary failure of GPi DBS in cervical dystonia, including botulinum toxin, additional GPi electrodes and STN DBS with, or without, pallidotomy. This case highlights the safety and efficacy of rescue bilateral STN electrode insertion for the management of bradykinesia and partial secondary failure of GPi DBS in segmental cervical dystonia,