MRI of the head for unexplained chronic headache

MBS item description
Referral by a medical practitioner (excluding a specialist or consultant physician) for a scan of head for a patient 16 years or older for:
- unexplained chronic headache with suspected intracranial pathology (R) (K) (Contrast) (Anaes.)

There is a lack of evidence that neuroimaging improves health outcomes in most headache syndromes. Serious intracranial pathology is a rare cause of chronic headache. Abnormalities detected on neuroimaging may not be clinically significant but may lead to further unnecessary investigations or interventions.

About chronic headache
Migraine, tension-type and medication overuse account for the vast majority of chronic headache. Investigations, including neuroimaging, do not contribute to the diagnosis of most primary headaches.

Serious causes of secondary headache are rare; they include tumour (<1%), infection (<1%), idiopathic intracranial hypertension (<1%) and arteritis (<1%) [2]. These conditions usually have typical history and/or clinical signs.

It is uncommon for secondary causes to present as headache alone. For example, intracranial tumour presents solely as headache in only 3-4% of cases.

Consider imaging in patients with chronic headache and an abnormal neurological exam or in those reporting symptoms suggestive of increased intracranial pressure, e.g. a frontal headache that is worse on lying down, or associated with vomiting, blurred vision or personality changes.

Headache and MRI
The benefit of neuroimaging is in detecting significant and treatable lesions with impact on quality of life. People presenting with headache alone are unlikely to have such lesions.

When intracranial pathology is suspected, MRI is the preferred imaging modality. MRI has greater sensitivity and yield than CT. However CT is usually quicker if urgent assessment is needed.

MRI cannot detect all serious causes of secondary headache, e.g. giant cell arteritis.

Neuroimaging for reassurance is not supported by evidence. Normal results tend to provide only temporary reassurance at the risk of finding incidental abnormalities.