

# CT scanning in the investigation of headache - Marlborough

## Key messages

- The vast majority of headaches are benign
- A thorough history of the headache and a basic neurological examination is essential
- Very few patients will require a CT scan
- Red flags alert the clinician to take extra care in the history and examination but are not by themselves indicators for CT scanning
- Imaging for reassurance only is not a good use of the available resource

## Population prevalence of headache types:

### Primary headache

- Tension h/a 69%
- Migraine 16%
- Idiopathic stabbing 2%
- Exertional h/a 1%
- Cluster h/a 0.1%

### Secondary headache

- Systemic infection 63%
- Head injury 4%
- Vascular disorders 1%
- SAH <1%
- Neoplasm 0.1%

A detailed account of headache presentation and management is beyond the scope of this guideline (see BPAC Best Practice, Issue 7, August 2007) but a thorough history of the headache and a basic neurological examination of the patient is the first duty of the attending practitioner.

Unless emergency management is required the patient should be asked to complete a headache diary and book a follow-up GP appointment (the cost of this is far less than reaching too hastily for the referral pad.)

Most doctors are aware of headache “red flags” but it should be remembered these are not highly specific and by themselves are not indicators for CT scanning.

For example, the red flag ‘*change in longstanding headache pattern*’ is probably the commonest reason to request a CT but is usually due to worsening of the headache disorder rather than an underlying secondary cause.

However, some flags are more ‘red’ than others and the following should be raise greater concern:

- Focal neurological signs (eg. papilloedema, visual field defects, sixth nerve palsy)
- Associated neurological symptoms (eg. ataxia, seizures, personality change)
- “First or worst” headache arising within seconds (consider SAH)

Estimate no more than 1 referral per year per GP FTE

## General referral guidelines:

History and examination suggestive of primary headache	History and examination suggestive of secondary headache
<ul style="list-style-type: none"><li>• Imaging not recommended</li></ul>	<ul style="list-style-type: none"><li>• SAH suspected → phone CT technologist to arrange urgent CT</li><li>• Brain tumour or RICP suspected → fax urgent CT request to Wairau Hospital</li></ul>

As well as this strict protocol, the radiology department also recognise we GPs get some patients with striking or worrying symptoms that would warrant investigation. If you have one of these it is recommended you discuss this with the radiologist on call who will consider whether that referral could be covered under this pathway.