Management of chronic headache in adults

General principals in the management of chronic headache

The majority of patients referred to the neurology department have one or more of the primary headache syndromes. They are likely to be managed according to the advice below. Following the advice below before referring patients to the neurology department will save unnecessary delay in the treatment of your patient. Please check your patient has no red flags which require urgent action. Please see the link below for red flags. Please note that you should fill in and return the chronic headache referral form below when making a referral. If you do not use this form, your referral will be returned to you.

Important Links and Documents

Headache - red flags

Chronic headache referral form

Medication overuse headache

This should be excluded in all patients with chronic headache and should be considered a likely diagnosis in any patient who:-

1. Has a headache >14 days/month and which has developed or worsened while taking regular symptomatic medication

2. Is taking triptans, ergots, opioids or combination analgesics 10> days/month or simple analgesics >15 days/month

Management: Stop medication – most patients will suffer an exacerbation in the headaches BUT headaches usually improve after 2-4 weeks. A

common cause of treatment failure in chronic headache is the concurrent use of analgesics >14 days per month.

Migraine

This is most common cause of severe headache referred to the Neurology department and affects 6 million people in the UK. The World Health Organisation ranks it top 20 disabling condition women aged 15-44. It is estimated that migraine costs the UK almost £2 billion a year in direct and indirect costs.

Patients who present with a pattern of recurrent episodes of severe disabling headache associated with nausea and sensitivity to light, and who have a normal neurological examination, should be considered to have migraine and managed according to the advice shown below.

General measures such as the avoidance of known triggers should be employed. Patients should be given information about migraine, there are several useful online resources including the migraine trust. It is very important to avoid the overuse analgesics as, this as a common cause of migraine which is refractory to treatments. Opiod analgesics should have no role in the management of chronic headache.

Useful links

Home - The Migraine Trust

Treatments for acute attacks

Oral triptans are recommended for acute treatment in patients with all severities of migraine if previous attacks have not been controlled using simple analgesics.

Migraine is associated with significant disability and is often under-treated. A stepped approach for acute treatment of migraine is recommended, starting with aspirin or an NSAID. If this is not effective a triptan should be used. Combining a triptan with a NSAID may ehance its efficacy. Some patients respond to one particular triptan but not others and therefore several different triptans may need to be tried in order to find the most

effective one. Triptan should not be used >10 days per month because the are potent causes of medication overuse headache.

Opioid analgesics should not be routinely used for the treatment of patients with acute migraine due to the potential for development of medication overuse headache.

First line preventative treatments:

The following preventative treatments should be tried in patients experiencing frequent migraine headaches before referring to the neurology department provided there are no contraindications. The dose of each drug should be gradually escalated until headaches are significantly better or the patient achieves to maximum tolerated dose. Each drug should be tried for a minimum of 3 months as they often take several months to reach their maximum efficacy.

- **Propanolol MR** (80mg-160mg), metoprolol (50-100mg).
- **Topiramate** (50-200mg), starting at 25mg increasing in increments of 25 mg each fortnight until effective or maximum tolerated dose achieved.
- **Sodium Valpoate** (800-1500 mg), starting 200 mg bd, increasing in increments of 200mg each fortnight until effective or maximum tolerated dose achieved. Valproate should be avoided in women of child bearing potential - see medicines regulatory authority guidance below.
- **Amitriptylline** (10-150mg), starting 10mg increasing in increments of 10mg each fortnight until effective or maximum tolerated dose achieved
- **Venlafaxine** (75-150mg)

Regulatory Guidance

Valproate Medicines Regulatory authority guidance

Second line agents which may be helpful:

Riboflavin (200mg OD), **Flunarizine** (5-10mg), **Verapamil** (120-360mg), **Pizotifen** (1.5-3mg)

Botulin toxin injection: Licensed for chronic migraine only in patients who have failed first line agents. This service is administered by the chronic pain service.

Occipital nerve blocks:
sometimes helpful, particularly is associated with tenderness in occipital region.

Cluster Headache

These are excruciating headaches centred around the eye. They are often discribed as the "worse pain of my life". In contrast to migraine, a key symptom is restlesness. Other features of cluster headache are:-

- They are short lived (15-180 minutes)
- Attacks are always unilateral
- Autonomic features are usually present

80–90% of patients have episodic cluster headache (ECH), which is recurrent bouts, each with a duration of more than a week and separated by remissions lasting more than four weeks. The remaining 10–20% of patients have chronic cluster headache. All patients presenting with cluster headache should undergo a MRI brain with specific views of pituitary gland and cavernous sinus because there is an increase incidence of secondary pathology in these areas. Other types of trigeminal autonomic cephalgia, such as paroxysmal hemicania can sometimes be mistaken for cluster headache. Patients should be directed to the cluster headache support group **OUCH UK** . This site provides very useful information for patients and physicians about cluster headache.

Useful links

OUCH UK

Acute treatments for cluster headache

The only treatments currently effective for cluster headache are:
100% O2 (7–12 l/min) via non-rebreathing mask and special regulator. This is rapidly effective in relieving pain in the majority of sufferers. It should be

inhaled continuously for 15–20 minutes.The BOC specifications are “Multiflow regulator code 888842” and “Face mask (variable) (005) code 888845”.

Subcutaneous sumatriptan - Up to 12mg per 24 hours. Medication overuse headache is not an issue in cluster headache.

To shorten a cluster bout:

Prednisolone 1 mg/kg/day for 5 days then reduce by 10 mg every 3 days. Relapse almost invariably occurs as the dose is tapered. For this reason, steroids are used as an initial treatment in conjunction with preventatives, until the latter are effective.

Ergotamine 1-2mg orally for short term prevention. Concomitant use of sumatriptan is contraindicated

Longer term preventative treatments for cluster headache

Verapamil (240-960mg) :Higher doses than commonly used in cardiology are commonly required. Baseline ECG required as some patients develop heart block on high doses. Start 80 mg three times daily, and thereafter the total daily dose is increased in increments of 80 mg every 10–14 days. An ECG is performed before each increment. The dose is increased until the cluster attacks are suppressed, side effects intervene or the maximum dose of 960 mg daily is achieved.

Lithium (600-1200mg). Renal and thyroid function tests should be performed before initiation of treatment. Start on 300 mg twice daily and titrate dose using the protocol outlined in the British National Formulary, aiming for a serum lithium concentration in the upper part of the therapeutic range. Many patients will benefit from dosages between 600–1200 mg daily. The concomitant use of non-steroidal anti-inflammatory drugs(NSAIDs), diuretics, and carbamazepine is contraindicated.

Trigeminal Neuralgia

These are very severe, brief lancing or "electric shock" pains. The pain duration is brief (few seconds) easily distinguishing it from cluster headache or paroxysmal hemicrania. The pain occurs in the maxillary and mandibular divisions of the trigeminal nerve in 90% of patient and when present in the ophthalmic division it has usually been in the other two divisions for many years. There are often sensory triggers - bushing teeth or touching skin. Autonomic symptoms are not prominent in trigeminal neuralgia.

Patients should be directed to the following webpage which contains useful information about Trigeminal Neuralgia:

Trigeminal neuralgia

Treatment of Trigeminal Neuralgia

Carbamazepine (200-1600mg) is the most effective drug for this disorder. Build up dose as quickly as side effects will allow until pain is suppressed. If resistent to Carbamazepine alone add in **Baclofen 10 mg** bd and increase until pain suppressed or on maximum tolearated dose and if still resistent to treatment add in **Phenytoin (100-400mg)**. Alternatives include gabapentin, pregabalin and lamotrigine although the latter takes a long time to titre the dose upwards which limits its utility.

If two or more drugs are ineffective it is likely that the patient will require an intervention such as an **injection in trigeminal nerve** (Refer to Maxillofacial surgeons) or **Microvascular decompression** (refer to Neurosurgery). There is a joint clinic run by the maxillofacial and neurosurgeons in Cardiff for patients with refractory trigeminal neuralgia. Patients presenting with trigeminal neuralgia should undergo MRI scanning with high resolution views of the trigeminal nerve

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