Adult Headache Primary Care Pathway

NHS Doncaster Clinical Commissioning Group

- Do you have a headache all the time or does it come & go? (Tension Type Headache or Medicines Overuse Headache usually has pain all the time)
- If intermittent what do you do when you have the pain? (patients with migraine want to lie/sit still when pain is bad, those with cluster headaches can't sit still when having an attack)
- What medication have you taken before? What are you taking now?

Patient attends with Headache

Take history & examine including BP, Temporal arteries (if age > 50years) & fundoscopy

Red Flags - Headache that is new or unexpected in an individual patient

- Thunderclap headache (intense headache of "explosive" onset suggest SAH)
- Jaw claudication (suggests temporal arteritis - take ESR /CRP & start steroids immediately)
- Headache with atypical aura (duration >1 hour, or including significant / prolonged motor weakness)
- Headache associated with postural change (bending) or coughing (possible raised ICP)
- New onset headache in patient with history of cancer, especially if < 20 years
- Unilateral red eye – consider angle closure glaucoma
- Remember carbon monoxide poisoning (also causes lethargy + nausea)
- Rapid progression of sub-acute focal neurological deficit*
- Rapid progression of unexplained cognitive impairment / behavioural disturbance*
- Rapid progression of personality changes confirmed by witness where there is no reasonable explanation*
- New onset headache in a patient with a history of HIV / immunosuppression*
- New onset headache in a patient older than 50 years *
- Headache causing patients to wake from sleep*
- Progressive headache, worsening over weeks or longer*

Consider admission, urgent MRI/CT scan (marked *) or 2ww referral as appropriate

Eliminate red flags

Secondary headache - non serious cause

Posterior headaches often relate to cervicogenic headaches

Unlikely to be sinuses, TMJ dysfunction or teeth unless other signs /symptoms indicative of this

Consider medication – esp combined oral contraceptive pill (OCP). If patient has migraines with aura then OCP is contraindicated

Consider facial pain trigeminal neuralgia as a cause of 'headache'

Primary Headache

The major types are listed below – it is important to realise however that patients may present with more than one type, so can develop tension type headaches on underlying migraine, or medication overuse with tension type headaches
NICE recommends keeping a headache diary

Most people who attend their GP with recurrent / chronic headaches have a migraine.

A recurrent severe headache associated with nausea and photophobia is 98% predictive of migraine

Migraine without aura

Diagnostic criteria - at least 5 attacks fulfilling criteria 1-4
1) Lasts 4-72 hours untreated
2) At least 2 of the following
   Unilateral location
   Pulsating quality
   Moderate/severe pain
3) Nausea / vomiting and/or photophobia
4) No other cause identified

Chronic migraine with or without aura Occurring everyday needs specialist Review

Migraine with aura

Occurs in 1/3 of migraine sufferers
Aura 5-60 minutes prior to headache
Usually visual – note blurring & spots not diagnostic

Chronic migraine with or without aura occurring everyday needs specialist review

Tension type headache (TTH)

Usually episodic
Deemed chronic if >15days per month
Stress is common trigger but not always obvious

Can occur in combination with migraine and secondary headache triggers especially cervicogenic /neck problems

Medication Overuse (MOH)

M:F (1:5 ratio)

Medication history is crucial especially use of over the counter analgesia

Can occur with other headache types
Prophylaxis medication doesn't help & can worsen

Cluster headache

Affects M:F (3:1 ratio)
Usually aged 20+ years
Bouts last 6-12 weeks.
Usually occur 1-2x year, often at same time of year.
Rarely chronic throughout year.
Very severe – often at night & lasts 30-60 minutes
Strictly unilateral
Ipsilateral conjunctival injection, rhinorrhea +/- Ptosis confirm

Adult Headache Pathway

Migraine with / without aura

Step1 - For acute attacks simple analgesic & triptan (evidence suggest combination may be best)
- Consider adding anti-emetic
- Avoid opioids
- May need to try more than one type of triptans. Care needed as frequent use can lead to triptan overuse (a form of MOH). Aim to use <2 doses / week.
- Use most cost effective first. Also note migraines often return 48-72 hours post use of a triptan

Step 2 - If headaches are frequent &/or acute medication is used very frequently, prophylaxis should be considered. This should be titrated until control is gained and may take 6-8 weeks before beneficial effects are seen. It will usually be continued for at least 6 months before considering a trial without.

1st line prophylaxis:
Propranolol is the β-blocker of choice
And / Or
Amitriptyline before bed- Initially small dose- 10mg nocte increasing up to 75mg.
(NB pizotifen now not recommended)

Step 3
2nd line prophylaxis – Topiramate - 25mg od to max 50mg bd (See page 5 & 6 for detailed guidance)

Tension Type headache (TTH)

Step 1- Simple analgesic (avoid opioids) along with explanation & reassurance. Look at triggers and consider MOH.

Step 2- consider alternative NSAID such as naproxen 500mg bd- maybe worthwhile taking regularly for a while if headaches are severe (with PPI cover if needed)

Step 3- Consider additional therapies eg acupuncture

Step 4- If headache is severe, frequent & persistent consider amitriptyline up to 75mg.

- β blockers usually not helpful & benzodiazepines should be avoided.
- SSRIs not helpful unless there is underlying depression

Reconsider and exclude red flags again (See part 1) Also consider mixed headaches- Migraine & TTH and/ or MOH

Consider whether CT should be part of diagnostic process & request eGFR blood test at time of request. Add "Direct Access Headache Pathway (DAHP)" on form.

No- CT not appropriate. Further advice needed about diagnosis or management

Yes- Patient Accepts CT Scan

CT SCAN

Abnormal CT scan or patient not reassured despite normal CT or need further advice

Normal CT scan and patient reassured- continue with RX- consider trials of higher dosages for longer periods

REFER

Cluster headache

Most patients with new onset cluster headaches will require referral to a neurologist for advice

Step 1- Though short lived medication is nearly always needed (Subcutaneous or nasal triptan should be tried)

Medicine Overuse Headache (MOH)

Medicine Overuse Headache (MOH)
- Only treatment is withdrawal
- Education & communication is critical
- Sometimes regular naproxen may be used in the early stages of withdrawal
- If the patient struggles, Amitriptyline as a prophylaxis maybe used
- Can occur on top of other types of headaches

Remember- lifestyle measures may help

Menstrual Migraines can be identified via headache diary. May respond to hormonal Rx see www.bash.org.uk

Care needed with pregnancy- these guidelines do not apply to pregnancy or children- see NICE & BASH guidelines at www.bash.org.uk

Don't forget patients often have more than one type of headache

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NHS Doncaster CCG Adult Chronic Headache Pathway With Open Access to CT Scanning

The following information is to support prescribers regarding the medicines aspects of the pathway, please refer to the BNF or Summary of Product Characteristics for further information on contraindications, precautions, adverse effects and interactions.

These guidelines have been developed using both British Association for the Study of Headache (BASH 2010) and NICE Headache (2012) guidelines.

Treatment of acute migraine

A stepped approach is often recommended commencing as early as possible with an analgesic and anti-emetics/pro-kinetic if required, and escalating to a 5HT1 receptor agonist (triptan) if this approach fails.

Aspirin or ibuprofen with or without paracetamol	Need to establish therapeutic levels quickly aspirin 600-900mg or ibuprofen 400-600mg paracetamol 1g
Metoclopramide	metoclopramide 10mg
Aspirin plus metoclopramide	Aspirin 900mg plus Metoclopramide 10mg, maximum three times a day (prescribe as individual drug)
Paracetamol plus metoclopramide	Paracetamol 500mg plus Metoclopramide 5mg (prescribe as individual drug)
Diclofenac suppositories	Diclofenac 50mg or 100mg – see notes below

Notes:

1. Please be aware of recent MHRA guidance on the use of anti-emetics and diclofenac.
2. Drugs should be given as soon as the onset of an attack is recognised.
3. The addition of a gastric motility agent will aid gastric emptying, as well as relieving nausea.
4. Anti-migraine drugs containing Metoclopramide are not suitable for patients under the age of 18 years.
5. Since peristalsis is often reduced in migraine attacks, dispersible preparations may be helpful.
6. Suppositories are useful if vomiting or severe nausea present.

Triptans ($5HT_1$-receptor agonists)

Please see Doncaster formulary at http://medicinesmanagement.doncasterccg.nhs.uk/formulary/formularies/ for further drug information. Try using the most cost-effective preparation first line, current Doncaster formulary triptans are listed below.

Sumatriptan (first line)	Tablets 50, 100mg Injection 6mg per 0.5ml Nasal spray 10mg or 20mg per 0.1ml/dose
Zolmitriptan	Tablets 2.5mg or Melts 2.5, 5mg

Notes:

1. NICE recommends that oral triptans should be used first line and other preparations only considered if these are ineffective or not tolerated.
2. A second Triptan should not be taken if the first dose is ineffective.
3. Triptans are contraindicated in, uncontrolled hypertension, or risk factors for coronary heart disease or cerebral vascular disease.
4. Different Triptans have different profiles of 5HT site action. If the first Triptan tried fails, it is worth trying alternative ones. A pragmatic approach would be to choose the cheapest one from each group as a first line.
5. Nasal spray is useful when vomiting is a problem.

Prevention of migraine

Prophylaxis is used to reduce the number of attacks in circumstances when acute therapy, used appropriately, gives inadequate symptom control. There are no specific guidelines as to when prophylaxis should be commenced. Considerations include frequency, impact, failure of acute therapy, avoidance of medication overuse headache. The potential for teratogenic effects should be noted particularly with anti epileptic medications. In line with NICE recommendations these updated guidelines no longer include a recommendation to use pizotifen. Additionally propranolol is now recommended first line again in line with NICE recommendations and licensed indications.

Notes:

1. Propranolol is the β-blocker of choice but Atenolol is an alternative (unlicensed indication).
2. Start at the lowest dose and build up gradually. Maintain the maximum tolerated dose for a minimum of 6 weeks before assessing. Discuss with patient at 6 months whether a gradual reduction and elimination of prophylactic medication might be considered.
3. Amitriptyline is useful with co-existent tension type headache, disturbed sleep or depression.

Topiramate

Topiramate is licensed for migraine prophylaxis in adults, and it is now recommended for use in the NICE headache clinical guideline.

Topiramate tablets are now available generically and should be prescribed in preference to sprinkle capsules due to price difference.

Costs (Drug Tariff November 2016)

Topiramate tablets **25mg x 60 £1.69** **50mg x 60 £2.01**	Topiramate sprinkle capsules (Topamax ®) 25mg x 60 £14.55 50mg x 60 £55.60

The SPC (summary of product characteristics) will have full information on cautions, contra-indications and side effects.

Place in therapy
This will be tailored to each patient, but as highlighted in the headache pathway, it should be considered when

- The frequency of migraines is such that regular prophylaxis is warranted
- A suitable trial of first line prophylactic medication (β-blockers and/or amitriptyline) have failed to offer relief of symptoms
- Second line therapy is Topiramate

Review
Continuing therapy should be reviewed every 6 months.

Dose
Note can take 6-8 weeks before maximum effect gained.

Commence topiramate at 25mg nightly, and increase (see below) if required.

Titration Schedule
The dosage should then be increased in increments of 25 mg/day administered at 1-week intervals. If the patient is unable to tolerate the titration regimen, longer intervals between dose adjustments can be used.

Some patients may experience a benefit at a total daily dose of 50 mg/day. The recommended total daily dose of topiramate as prophylactic treatment of migraine headache is 100 mg/day administered in two divided doses. No extra benefit has been shown from the administration of doses higher than 100 mg/day.

Topiramate Dosage	Morning	Evening
Week 1		25mg
Week 2	25mg	25mg
Week 3	25mg	50mg
Week 4	50mg	50mg

Adult Headache Guideline

Contraindications
Known hypersensitivity
Breast feeding
Pregnancy

Cautions
Avoid abrupt withdrawal
Hepatic impairment
Renal impairment
Topiramate has been associated with acute myopia with secondary angle closure glaucoma, typically occurring within 1 month of starting treatment. Choroidal effusions have also been reported. If raised intraocular pressures occur – seek ophthalmology advice and stop topiramate as rapidly as possible

Side Effects
Nausea, dyspepsia and diarrhoea
Dry mouth and taste disturbance
25% of people experience anorexia/loss of appetite
Drowsiness, insomnia, dizziness
50% of people experience initial paraesthesia (which usually settles)

Rarely - reduced sweating metabolic acidosis and alopecia
Very rarely - leucopenia, thrombocytopenia and serious skin reactions

Interactions
Oestrogens – metabolism accelerated – reduced contraceptive effect
Progestogens – metabolism accelerated – reduced contraceptive effect
Glibenclamide – possibly reduces plasma concentrations
Lithium – possibly affects plasma concentration

For further information on contraindications, precautions, adverse effects and interactions refer to the BNF or Summary of Product Characteristics.

Adult Headache Guideline

Useful Resources – these guidelines have been developed using NICE and BASH guidelines below

1) NICE 2012 Headaches – Diagnosis and management of headaches in young people and adults. Clinical guideline 150

2) The British Association for the Study of Headache (BASH) are the main source of these guidelines, and they have more information at www.bash.org.uk/

3) Migraine in Primary Care Advisors is another useful web-site with guidance and information on further education www.mipca.org.uk/

4) The International Headache Society http://ihs-classification.org/en/

Self Help Resources

Patient UK – www.patient.co.uk

Migraine Action association - http://www.migraine.org.uk/index.aspx

Migraine Trust - http://www.migrainetrust.org/

Organization for the understanding of cluster headaches - http://www.ouchuk.org/

About this Guideline

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