Headache pathway
Referral criteria for headache referrals to secondary care

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Key points

- Migraine, TTH and MOH are most common headache disorders and in most cases not difficult to manage → initial primary care management recommended
- Good management of most headache disorders requires monitoring over time
- History is all-important, there is no useful diagnostic test for primary headache disorders and MOH
- Headache diaries (over few weeks) are essential to clarify pattern and frequency of headaches, associated symptoms, triggers, medication use/overuse
- Special investigations, including neuroimaging, are not indicated unless the history/ examination suggest secondary headache
- Sinuses, refractive error, arterial hypertension and cervicogenic problems are not usually causes of headaches
- Opioids (including codeine and dihydrocodeine) not to be prescribed in migraine

Assessment of patients with headache

Full history, including:

- age of headache onset (if >50 years consider Temporal arteritis)
- special attention to any new headache or significant change in existing headache
- duration of headache:
  - Chronic migraine (*longstanding* and *continuous*; previously intermittent) vs
  - New Daily Persistent Headache (usually *recent* and *continuous*) vs
  - Trigeminal or occipital neuralgia (*paroxysmal*)
- frequency (if very frequent must suspect medication overuse)
- any specific warning features (see "Red flags")
- medications (if MOH suspected – stop analgesics and caffeine; COCP in migraine)

Examination (mandatory if secondary headache suspected), including

- Visual acuity; visual fields to confrontation and fundi
- Blood pressure

Patients with acute worst ever headache should be referred to ED

Abbreviations: TTH - tension-type headache
MOH - medication-overuse headache
TN – trigeminal neuralgia
SUNCT - severe unilateral neuralgiform headache with conjunctival injection + tears
SUNA - severe unilateral neuralgiform headache with autonomic features
NDPH - New daily persistent headache
Qol - Quality of life
COCP – combined oral contraceptive pill
PIFP - Persistent idiopathic facial pain

When to refer to a Specialist

(Consider referring to ED depending on presentation and waiting OPD time)

Diagnostic uncertainty, including unclassifiable, atypical headache

Diagnosis of **any of the following**:

- Chronic migraine (patients who have failed at least one preventative agent)
- Cluster headache
- SUNCT/SUNA>
- Persistent idiopathic facial pain
- Hemicrania continua/chronic paroxismal hemicranias
- Trigeminal neuralgia

Suspicion of a serious secondary headache (Red flags)

- **Progressive** headache, worsening over weeks or longer
- Headache triggered by **coughing, exercise or sexual activity**
- Headache **associated with** any of the following:
  - **postural change** (indicative of high or low intracranial pressure)
  - papilloedema
  - **focal neurological deficit** or seizures
  - rapid progression of unexplained cognitive/personality/ behavioral change
  - unexplained **fever**
  - weight loss or poor general condition

New headache:

- Presenting as **thunderclap (**intense headache with "explosive"/abrupt onset)
- In a patient **≥ 50** years, check ESR/CRP and refer
- **New daily persistent headache** (and no prior history of headache)
- In a patient with risk factors for **immunodeficiency or cancer**
- In a patient with family history of **glaucoma**

Headache with **atypical aura,** especially

- prolonged (lasting> 1 hour) or including significant prolonged motor weakness
- new aura without headache in the absence of a prior history of migraine

Headache not responding satisfactory to management in primary care

Comorbid disorders requiring specialist management

No

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Initial primary care management

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Migraine

Recurrent **moderate/severe** pain *typically but not always:*

- **unilateral** and/or **pulsating**
- lasting 4-72 hours untreated
- **associated with**
  - nausea / vomiting
  - photo- ± phonophobia
  - aggravated by routine physical activity, and **disabling**
- **freedom** from these symptoms **between attacks**

Usually episodic

Can be **chronic** (15% of cases):

- headache ≥15 d/month, of which ≥8 d migrainous
- often **complicated by**:

- depression and/or anxiety
- low back and/or neck pain
- **medication overuse**

Migraine with aura

≈ 1/3 of patients with migraine

Aura 5-60 minutes prior to / with headache

Typical

- visual (>90% of auras): blurring is not diagnostic; and/or
- unilateral sensory

Less common

- brainstem (vertigo, tinnitus, diplopia, ataxia);
- speech and/or language

Rare

- motor weakness

Full recovery after attacks

Acute attack (Restrict simple analgesia to max 6 d/month)

Prefer soluble analgesic, early in the attack, at an adequate dose

- Simple analgesia (high dose aspirin, paracetamol, NSAID) ± antiemetic, or if ineffective
- Triptans (oral, nasal spray, sc injection) or
- Simple analgesia + triptan ± prokinetic antiemetic
- Avoid COCP if any aura / severe migraine
- No triptan DURING aura

Prophylactic therapy (Restrict simple analgesia to max 6 d/month)

Start any drug at a low dose and increase if no major SE; trial for ≥ 8-12 weeks; tapered withdraw after ≥ 6 months of good control

- Propranolol LA 80-160 mg od
- Amitriptyline 10-100 mg at night / Nortriptyline 10-100 mg
- Topiramate 25mg od 2/52, titrate gradually to 50mg bd
- Candesartan 8-16mg od
- Sodium valproate 600-1500 mg/d (! not in women of child-bearing potential and pregnancy; Annual acknowledgment)
- Flunarizine 5-10 mg od

Medication overuse

- Daily or near-daily (≥15 d/month)
- Aggravation of a prior headache (usually migraine or TTH)
- Often worst early in the morning
- Great impact on QoL
- **Causally associated with regular use, over >3 months, of:**

- Opioids/ Triptans > 10 d/month
- Non-opioids > 15 d/month

- Usual acute migraine therapy ineffective
- Headache tends to worsen after analgesia withdraw, but in most cases improves within 2 months

Early intervention essential

Long-term prognosis usually very good

Withdrawal:

- Abruptly
- Tapering over a period of 2-4 weeks
- Replacing overused drug(s) with Naproxen 500 mg bd for max 3-4 weeks

Headache prophylaxis against antecedent headache may be introduced if intermittent primary headache features persist or emerge

TTH

Typically **mild/moderate** pain **without associated symptoms**

Not worse with activity

Can occur in combination with migraine

- **Infrequent episodic TTH** ≤ once/month
- **Frequent episodic TTH**
  - attack-like episodes on 1–14 d/month,
  - lasting hours to few days;
  - usually generalised (bilateral)
  - **pressure or tightness**, often spreading to the neck
- **Chronic TTH**
  - occurs on ≥15 days/month
  - may be daily and unremitting
  - may be associated with mild nausea

If infrequent, ≤2 days/week can be successfully treated with simple analgesia.

If frequency > 2 d/week – increased risk for medication use, consider prophylactic therapy:

- 1st line:

Amitriptyline 10-100 mg nocte or

Nortriptyline (same dose) less SE / less efficacy

- 2nd line:

Mirtazepine 15-30 mg od

- 3rd line:

Venlafaxine 75-150 mg od

Cluster headache

- Affects M:F (3:1 ratio)
- Bouts last 6-12 weeks
- Typically 1-2 x year
- Rarely chronic throughout year
- Very **severe** pain, **often at night**
- **Strictly unilateral**
- Lasts 15–180 min (commonly 30–60)
- Marked **agitation**
- Triggered by alcohol
- Accompanied by highly characteristic & strictly ipsilateral autonomic symptoms:
  - red and watering eye;
  - rhinorrhea / blocked nostril
  - +/- ptosis

Prompt referral at first presentation for specialist review + MRI!

Avoid oral triptans and analgesics

Acutely

- Nasal or sc triptan
- 100% Oxygen at ≥ 12L/min until response, or for ≥ 15 min

Specialist care

- Transition therapies
  - Prednisolone
  - Occipital nerve block
- Maintenance prophylaxis
  - Verapamil (ECG)
  - Lithium carbonate (levels)
  - Topiramate (?efficacy)

Other

Should be recognised in primary care, but may require specialist management

Trigeminal neuralgia

Triggered **unilateral** sudden excruciating facial pain

Brief, often serial

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Carbamazepine; Oxcarbazepine; Lamotrigine; Gabapentin

SUNCT / SUNA

Similar to TN (but frontal)

Autonomic ocular symptoms

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Lamotrigine

Ice pick / stabbing

Sudden brief head pains

Various locations

and

Chr Paroxysmal Hemicrania

Unilateral periorbital

Autonomic (red eye, lacrimation, nasal congestion, ptosis)

15-30 minutes; multiple/ day

and

Hemicrania continua

Unilateral “side-locked” constant headache >3 /12

+/- autonomic features

Restlessness

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Indomethacin +PPI

PIFP

Dull, daily persistent > 3/12

Poorly localized facial and / or oral pain

Often psychiatric comorbidity

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Amitriptyline, Gabapentin, Pregabalin