http://qrinfo.icst.org.uk/all-wales-headache-toolkit

GIG CYMRU NHS WALES

All-Wales Headache Differential Diagnosis Pathway

This is a pathway for the differential diagnosis of headache in primary care, aligned with the NICE Headache Scenario. This pathway does not replace clinical judgement.

	Features typically associated with the more common primary headache disorders, which can often be managed in primary care	Concerning features associated with headache that may warrant a referral to specialist teams or neurologists	Red flag features - if any are present with headache, consider specialist admission or urgent referral
STEP 1: HISTORY			
The onset, duration, frequency and temporal pattern of headache	Episodic Recurrent Long-standing (>6 months) and unchanging	Evolution over days to weeks New daily persistent headache New headache in over 50 years	Progressive headache Woken by headache Thunderclap
The characteristics of pain (location and spread, severity, nature and quality)	Stereotyped and unchanging headaches are generally not concerning: **Migraine:** pulsating, moderate to severe, disabling pain, causes avoidance of ADLs **Tension-type headaches:** Bilateral, pressing/ tightening, mild or moderate, but not disabling	**Stereotypical cluster headaches:** Unilateral, sharp, burning, throbbing or tightening, severe or very severe pain, restlessness or agitation Neuropathic pain in the face Unclassifiable, atypical headache	Changing headache
Any associated symptoms	Eye tearing, conjunctival injection, eyelid swelling or drooping, nasal congestion Nausea, vomiting, motion sensitivity, photophobia, phonophobia, scintillating scotomata, aura		Lethargy (different from baseline) Fever Persistent vertigo Seizure Visual loss, amaurosis fugax, diplopia
Headache triggers	Stress/ fatigue Menstrual cycle Medication or substance change Withdrawal (caffeine, alcohol)	Exercise-induced Chewing, talking Breeze	Valsalva Standing Lying down Recent head trauma Recent cranial surgery/ cranial shunt
Co-morbidities, travel, medication, occupational history?	No travel in last 3 months No recreational drugs Overuse of headache relief medications (see MOH)	HIV/ immunosuppression Isolated fever	New headache in pregnancy/ puerperium Neoplasm in history Systemic features
STEP 2: EXAMINATION			
Vital signs (BP, pulse, RR, temp, SpO_2)	Normal/ unremarkable		Signs of systemic illness
General appearance and mental state	Normal/ unremarkable	Agitation, resolving on cessation of headache	Reduced level of consciousness Non-blanching skin rash Confusion
Extra-cranial structures	Normal/ unremarkable		Temporal tenderness
Examine the neck	Normal/ unremarkable	Persistent cervical lymphadenopathy	Meningeal irritation
Fundoscopy	Normal/ unremarkable		Pupillary asymmetry and reactivity Papilloedema
Neurological examination (cranial and periperal nerves including gait)	Normal/ unremarkable		New focal neurological signs
STEP 3: INVESTIGATIONS			
Depending on the likely underlying cause and clinical judgement	In patients with isolated headache and a normal neurological examination, the likelihood of finding an underlying secondary cause of headache is unlikely; imaging should not be used solely for reassurance	Clinical intuition or gut feeling may warrant referral	In thunderclap, immediate admission In suspected GCA, refer to local guidelines In suspected Meningitis, give immediate IV/IM benzylpenicillin
STEP 4: DIAGNOSIS			
Differential diagnosis and the applicable management pathways	**Tension-type headache:** Bilateral, pressing/ tightening, mild to moderate pain, not aggravated by ADLs, 30 minutes - continuous **Migraine:** Unilateral or bilateral, pulsing, disabling, moderate to severe pain, aggravated by or causes avoidance of ADLs, 4-72 hours in adults **Medication overuse headache (MOH):** frequently masking the underlying headache disorders is the overuse of triptans, opioids or ergotamine (>10 days/ month), or simple analgesics (>15 days/month) **Cluster headaches:** Unilateral, sharp, burning, throbbing or tightening pain, severe or very severe, restlessness or agitation, 15-180 minutes *(shared care with neurology)*	Diagnosis to be confirmed in secondary care. Any patient who does not meet the criteria for primary headache disorders (green) and does not have any red flag features requiring urgent admission (red), should be considered for referral to local headache clinic or specialist neurology teams. Any patient with unclassifiable, atypical headache, or failure to respond to standard migraine therapies should also be referred. Any patient with **Cluster headaches** should have at least one consultation in secondary care	Differential diagnosis associated with these red flag features include: • CNS infection and meningitis • Giant cell arteritis (GCA) • Cancers • Stroke and TIA • Chronic subdural • Glaucoma • Carbon monoxide poisoning - also causes nausea and lethargy • Idiopathic intracranial hypertension
	Can be managed in primary care - see All Wales Management of Primary Headache Disorders Pathway	**Referral to specialist/ neurology teams**	**Specialist admission or urgent referral**

Designed by The Institute of Clinical Science & Technology

Version 1.0
Publication date: June 2023
Review date: June 2024