

Table 1

Clinical features and differential diagnosis of cluster headache

	Cluster headache	Migraine	Paroxysmal hemicrania
Pain location	Unilateral	Bilateral or unilateral	Unilateral
Pain quality	Variable (sharp, burning, pressing, boring)	Throbbing or pulsating	Variable (sharp, burning, pressing, tight, throbbing)
Pain intensity	Severe or excruciating	Moderate to severe	Severe
Duration of headache	15-180 min	4-72 hours	2-30 min
Frequency of headache	One every other day to eight per day Episodic: remission periods > 1 month Chronic: remission periods < 1 month over the course of a year	Episodic: < 15 days per month Chronic: > 15 days per month for > 3 months	> 5 attacks daily for > 50% of the time Episodic: remission periods > 1 month Chronic: remission periods < 1 month over the course of a year
Behaviour during attack	Restless or agitated	Patient wants to remain still	Restless or agitated
Cranial autonomic features	● Red and/or watery eye ● Nasal congestion and/or runny nose ● Swollen eyelid ● Forehead and facial sweating ● Constricted pupil ● Drooping eyelid ● Sensation of fullness in ear	May be present	● Red and/or watery eye ● Nasal congestion and/or runny nose ● Swollen eyelid ● Forehead and facial sweating ● Constricted pupil ● Drooping eyelid ● Sensation of fullness in ear
Migrainous symptoms	● Nausea common ● Ipsilateral photophobia and phonophobia ● Aura (often visual) in 14% of cases	● Photophobia and phonophobia (bilateral) ● Osmophobia ● Nausea and vomiting ● Aura - symptoms can occur without headache, are fully reversible, develop over 5 min or more and last up to an hour ● Typical aura symptoms: Visual – flickering lights, spots, lines and/or partial loss of vision ● Sensory – pins and needles, often spreading over face or up arm ● Speech – slurred, muddled, dysphasic	● Ipsilateral photophobia and phonophobia ● May have nausea
Triggers	● Alcohol (within an hour of ingestion) ● Warm environment ● Sleep ● Strong smells ● No cutaneous trigger	● Sleep disturbance ● Hunger or dehydration ● Menstrual period ● Alcohol (several hours after ingestion) ● Bright lights ● Strong smells ● Physical exertion ● Stress ● Dietary factors e.g. citrus fruit	● Alcohol ● Physical exertion ● Stress ● Strong smells ● No cutaneous trigger
First-line preventive treatments	Verapamil	Beta-blockers Antidepressants Topiramate	Indometacin – attacks will resolve completely on therapeutic doses
First-line acute treatments	Oxygen (100% ≥ 12 L/min) Subcutaneous sumatriptan	High-dose NSAID + triptan + antiemetic	Nil