Clinical Practice Guidelines: Neurological/Headache

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Date	February, 2021
Purpose	To ensure consistent management of patients with headache.
Scope	Applies to Queensland Ambulance Service (QAS) clinical staff.
Health care setting	Pre-hospital assessment and treatment.
Population	Applies to all ages unless stated otherwise.
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Headache

February, 2021

The term headache is a generalised term given to any pain in the region of head above the level of eye.[1] The pain associated with headache may be sharp, throbbing, dull, or vice-like in nature and may occur on one or both sides of the head, be isolated to a single location, or extend as a band across the skull. Headaches may be classified into two distinct categories based on their underlying cause as either primary or secondary:

- **Primary headaches** – no underlying cause is demonstrable and the problem is due to an abnormality at the molecular level. Primary headaches account for approximately 90% of all presentations with common diagnoses including Migraines, Tension, and Cluster headache.
- **Secondary headaches** – there is a clearly identifiable underlying cause, many with life-threatening or catastrophic consequences if not appropriately treated. Common diagnoses of secondary headaches include intracranial haemorrhages, tumours, and infections.[2,3]

The evaluation and differential diagnosis of headache should include a detailed history followed by a thorough general and neurological examination including the role of psychological factors, life events and stressful incidents.[4,5] Headaches by their very nature and complexity can make diagnosis and management difficult and clinicians therefore should have a low threshold for referring to further medical assessment and care.

Clinical features

Headache Red Flags:[3]

Thunderclap headache (intense, exploding, and hyperacute onset)
Headaches associated with fever, rash or ALOC
Meningeal signs (stiff neck, photophobia, or vomiting)
New onset headache in patients > 50 or < 10
Persistent morning headache with nausea
New onset of headache in patient with cancer or HIV
Progressive headache, worsening over weeks
Headaches associated with postural changes
Aura (warning sensation) that lasts longer than an hour, is different from previous aura, or occurs for first time on using oral contraceptive

Headache Yellow Flags:

Worsening headache following recent trauma to head
Taking an anticoagulant or antiplatelet drug
Hypertension during pregnancy
Previous history of intracranial bleeding
Onset during sexual activity
Family history of cerebral vascular abnormalities

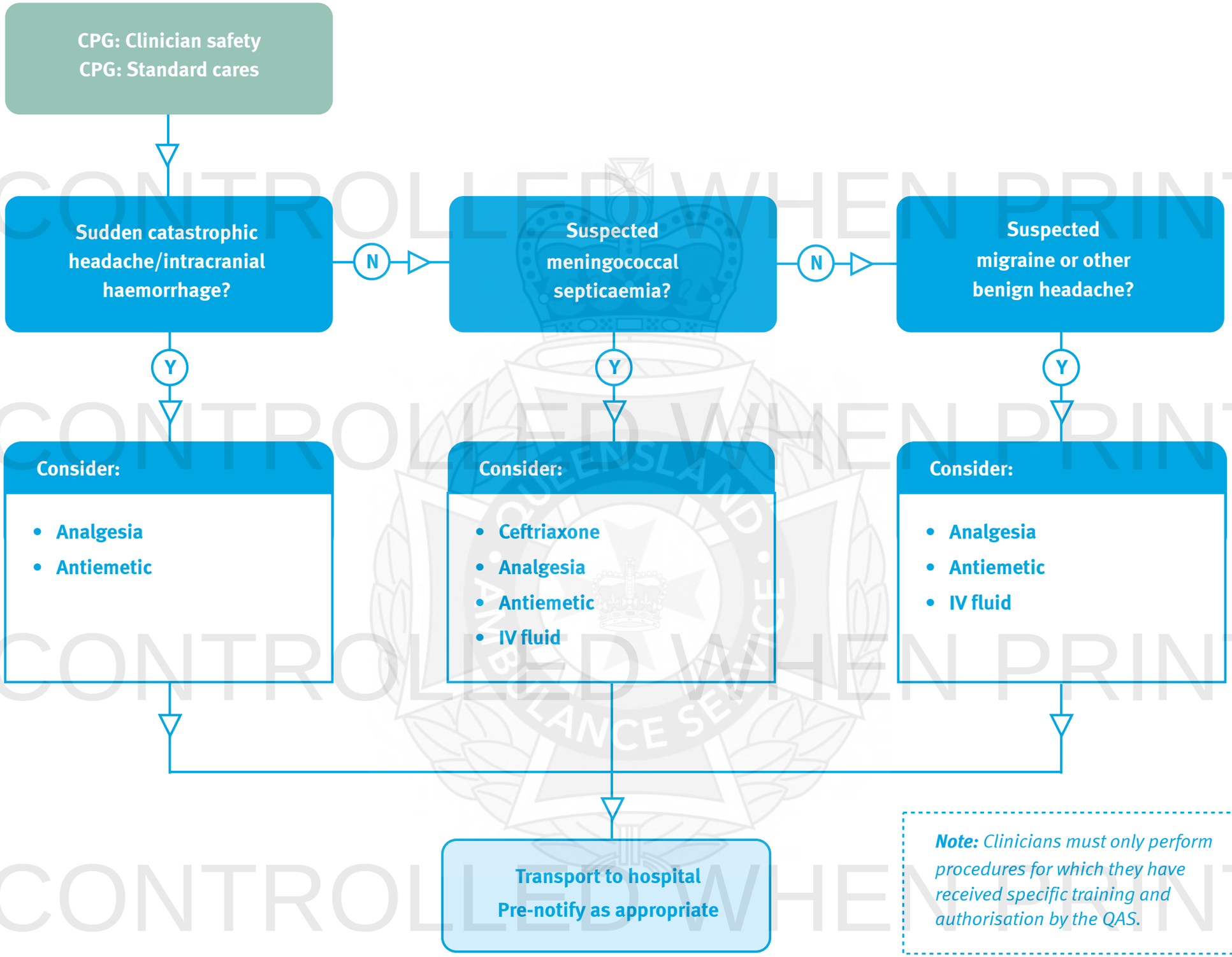
Headache Green Flags:

Symptoms associated with influenza
Known headache with ‘usual’ symptoms and triggers
Normal vital signs, normal assessment using the FAST technique and able to walk normally

Risk assessment

- Relief of symptoms with analgesia is not evidence of a benign cause
- Officers must not administer narcotics to patients with a history of chronic headaches as it has not been proven to be a successful intervention and may potentially increase the risk of reliance on such medication.

Description	Diagnosis	Clinical Features
Secondary headache	Meningitis	Fever, photophobia, stiff neck, rash, limb pain, cold peripheries, mottled skin and bulging fontanelle (babies)
	Encephalitis	Fever, confusion and reduced conscious level
	Subarachnoid haemorrhage	'Thunder-clap' or very sudden onset headache +/- stiff neck
	Head injury	Bruising and/or history of injury, reduced conscious level, periods of lucidity and amnesia
	Acute febrile illness	Fever and symptoms or underlying cause for example upper respiratory tract infection and tonsillitis
	Raised intracranial pressure	Worse on waking/sneezing, neurological signs), raised blood pressure and reduced pulse rate
	Medication overuse headache	Rebound headache on stopping analgesics
	Exertional or coital headache	Suggested by history of association
Primary headache	Tension type headache	Band around the head, stress and low mood
	Cervicogenic (referred pain from neck) headache	Unilateral or bilateral; band from neck to forehead and scalp tenderness
	Cluster headache	Usually male. Often a smoker. Nightly pain in 1 eye for 2–3 months then pain free for at least a year
	Migraine	Aura, visual disturbance, unilateral headache, nausea/vomiting and trigger



Note: *Clinicians must only perform procedures for which they have received specific training and authorisation by the QAS.*