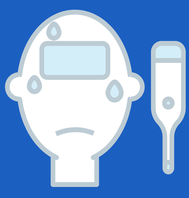
ASRA Headache Special Interest Group

Red Flag Headaches

Although the vast majority of “Primary headaches” can be debilitating, most are not due to worrisome pathology that require immediate medical attention. However, the presence of certain “red flags” may indicate a more ominous underlying cause.



Fever

• Headaches accompanied by systemic symptoms.
•Bacterial meningitis: Fever, headache, altered mental status, nuchal rigidity.
•Signs: Jolt accentuation, Brudzinski sign, Kernig sign, nuchal rigidity.
.Investigations: CBC, Lumbar puncture with CSF analysis, ± CT Head.
.IV antibiotics. Consider IV dexamethasone. Craniotomy for abscess drainage.
.Temporal arteritis may also be associated with a fever.

History of neoplasm

• Sudden onset or persistent worsening headache with no prior history.
• Headache that consistently awakens the patient.
• Hemicrania associated with contralateral neurological symptoms
• Headaches associated with episodes of disorientation, confusion , emesis, focal deficits, new onset seizures
• Neuroimaging, oncological referral, ICP lowering therapies, and definitive treatment of the tumor - surgery, chemotherapy and radiation.

Altered Mental Status or Neurological deficit

• Sudden onset or persistent headache with no prior history of migraines.
• Neurological symptoms may be present with Migraine headaches but are worrisome when they are abrupt in onset, last longer than 60 minutes, do not completely resolve .
• Cerebral venous thrombosis, internal carotid or vertebral artery dissection.
• Neuroimaging: CT Head/Neck angiography.
• Treatment of thrombosis: Anticoagulation vs antiplatelet therapy. Consider thrombolytics in early ischemic stroke and extracranial dissection.

Onset at age older than 50

•Age related comorbidities can be the cause of headaches.
• Giant Cell arteritis: Most common cause of systemic vasculitis in elderly patients.
• Temporal artery biopsy can confirm. Early empiric steroid therapy.
• Treatment: BP control, definitive treatment of intracranial tumors, thrombolytics, anticoagulants depending on etiology. Early empiric steroid therapy minimizes permanent blindness.
• Neuroimaging: If neurological exam is normal, urgent noncontrast head CT.

Abrupt or sudden onset : Thunderclap Headache

•Severe and explosive headache with peak intensity at onset and reaching maximum intensity within a minute.
• Symptoms include vomiting, neck stiffness, seizure, neurologic deficits, syncope, and alteration in mental status or coma
• Requires urgent medical evaluation to limit morbidity and mortality.
• Neuroimaging: CT Head has highest sensitivity in the first 6 h,
.Blood pressure control, Nimodipine, ventriculostomy, aneurysm clipping.

New headache

• Sudden significant change in headache character, frequency or quality
• Intracranial pathology - tumors, infection, thrombosis, hemorrhage and hypoglycemia.
• A thorough headache history and neurological exam is especially valuable.
. Analgesic overuse and medication side effects should also be considered.
• Further workup depends on etiology, severity and rapidity of onset of symptoms, and includes neuroimaging - MRI, CT or angiogram, CSF analysis, EEG, blood counts and cultures, blood sugar and blood pressure monitoring.

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Together, we can overcome this!

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