

Evaluation and management of headache in emergency department

Acute headache in the emergency department (ED) poses a diagnostic dilemma. Even the large majority are benign in nature, we must obtain accurate and detailed historical information and perform a thorough physical examination identifying life-threatening secondary causes. Secondary causes are broadly categorized into structural, vascular and infectious diseases. Primary headaches are treated in the ED with a focus on prevention upon discharge, whereas secondary headaches are emergency in nature and may be life threatening if not diagnosed.

A headache in benign nature may present with a very severe clinical presentation, and a headache in malignant nature may present with a mild clinical presentation. The aim in the emergency department should be to distinguish primary and secondary headache, to find the cause of secondary headache, to regulate the treatment of primary headache acute attacks.

Primary headaches have no structural or metabolic cause, while secondary headaches are caused by an underlying pathologic process. Migraine, tension-type, cluster, and thunderclap headache are all primary headache disorders. Secondary headaches are caused by conditions such as increased intracranial pressure, vascular pathologies, infection and brain tumours. Approximately 10% of the patients have secondary form. A complete headache history is the most important for diagnosis. History should include information about age of headache onset, pain intensity and character of the pain, trigger factors and comorbid conditions. The medical literature promotes red flags to direct the clinician for workup plan. The absence of red flags may suggest that no workup is needed. Clinical experience and large case series with a specific secondary headache form the basis for many red flags. It is possible to make a rapid assessment by asking a series of questions that will help you distinguish headaches. The next step is to exclude any possible red-flag symptoms. Red flag detection for secondary headaches requires the information of systemic symptoms, neurologic symptoms or signs, onset sudden or onset after the age of 50 years, and change of headache pattern.