



A STUDY ON DIFFERENTIATION OF HEADACHE PATTERNS PRESENTING IN OUTPATIENT SETTING.

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ABSTRACT Headache is one of the most common disabling conditions faced by people throughout the world. It causes a significant loss of active work hours and can also be because of some fatal causes like intracranial space occupying lesions. Outpatient cases in Neurology have a significant number comprised by headache patients. A meticulous history supported by detailed examination is must to differentiate between some primary and secondary causes of headaches. Here, we present our data regarding the proper diagnosis of headache patients depending on International Classification of Headache Disorders 3 (ICHD 3) beta version and their prevalence in outpatient departments.

KEYWORDS : Headache

INTRODUCTION :

Headache is one extremely common symptom and collectively headache disorders are amongst the most common of the nervous system disorders with a prevalence of 48.9% in the general population.¹ Headache affects people of all ages, races as well as socioeconomic status and is more common in women. Some headaches are very debilitating and have significant impact on an individual's quality of life, imposing huge burden of cost to healthcare and indirectly to the economy in general. Primary headache disorders constitute nearly 98% of all headaches; however, secondary headaches are important to recognise as they are serious and may be life threatening. Common primary headaches include migraine, tension type headache, trigeminal autonomic cephalgias whereas common secondary headaches can be secondary to neoplasms. Secondary headaches are uncommon but their recognition is extremely important as a timely intervention may be life saving. The most crucial aspect of headache diagnosis is history taking ; most patients, including those with common secondary headaches, have no signs and investigations are rarely required to exclude a secondary headache. Furthermore, unnecessary investigations must be avoided as around 8% of the population may have incidental abnormalities not related to headache.

Aims and objectives: To study about different headaches in Neurology outpatient department.

Inclusion criteria :

1. Patients presenting with headache to outpatient clinic.
2. Patients more than 18 years of age.

Exclusion criteria :

1. Patients less than 18 years of age
2. Patients with prior known cause of headache.

MATERIAL AND METHODS :

This was a prospective observational study done on the patients presenting to outpatient department at a tertiary care teaching hospital from India. All patients who were more than 18 years of age and confirmed as having either primary or secondary headaches after history, examination and appropriate investigations and fulfilling International Classification of Headache Disorders criterion (ICHD 3) beta version² were studied.

RESULTS :

100 patients who presented with either types of headache were included. 36 were males while 64 were females. Most common age of presentation was between 18-30 years of age (Table 1). Most of the patients presented with primary headache (71%) whereas a minority (22%) patients had secondary headache. 7% patients had features of both primary as well as secondary headaches. Most common primary headaches was Tension Type Headache (TTH) followed by migraine and then headache with features of both TTH and migraine (Table 2). The most common secondary headache was that associated with Cerebral Venous Thrombosis (CVT) followed by those with brain infections and followed by brain space occupying lesions (Table 3). Secondary headaches were commonly associated with features like

papilloedema or some focal neurological deficits. Most of the patients with secondary headache needed emergency admission for further workup and management while most of the primary headaches were managed on outpatient basis.

Table 1 : Age of presentation

Age of the patient	Total patients
18-30	24(24%)
31-40	22(22%)
41-50	21(21%)
51-60	13(13%)
>60	20(20%)

Table 2 : Causes of headache (primary)

Cause of headache (primary)	Number of patients
Tension Type Headache (TTH)	21(21%)
Migraine	19(19%)
Mixed TTH + Migraine	9(9%)
Cluster headache	6(6%)
Medication overuse headache	6(6%)
SUNCT/ SUNA	3(3%)
Nummular headache	2(2%)
Hypnic headache	2(2%)
Paroxysmal hemicranias	1(1%)
Hemicrania continua	1(1%)
Primary sexual headache	1(1%)

Table 3 : Causes of headache (secondary)

Cause of headache (secondary)	Number of patients
Cerebral Venous Thrombosis (CVT)	7(7%)
Meningitis	4(4%)
Space occupying lesions	4(4%)
Idiopathic Intracranial Hypertension (IIH)	4(4%)
Temporal arteritis	1(1%)
Sub-arachnoid haemorrhage	1(1%)

DISCUSSION :

Primary headache disorders constitute the vast majority of headache disorders, with migraine and tension-type headache (TTH) being the most prevalent. TTH affects 60–80% of the population while migraine has a prevalence of 15% (male 7.6%, female 18.3%)³. Migraine also has a variety of presentations and manifests as migraine without aura or with migraine with aura. These auras can be visual/ auditory or even other types of sensory ones. A lot of patients have features which are common in between migraine and tension type headache and generally classified as mixed vascular headaches. Medication-overuse headache (MOH) is a secondary headache disorder and often co-exists with primary headache disorders, and is often described with them. It usually occurs after prolonged habitual intake of analgesics for one or other types of primary headaches. Trigeminal Autonomic Cephalgias comprise of the other majority of primary headaches and it consists of cluster headache/ paroxysmal hemicrania/ hemicranias continua and other rare forms like SUNCT or SUNA. These are most disabling

headaches. They need experts to be diagnosed and usually have a good response to drugs like indomethacin. Other rare forms of primary headaches include primary sexual headache, nummular headache and hypnic headache. These all require very careful history to prevent misdiagnosis. Secondary headaches include serious life-threatening conditions such as subarachnoid hemorrhage (SAH), intracerebral hemorrhage, cerebral venous sinus thrombosis (CVT), cervical artery dissection, brain space occupying lesion, pituitary apoplexy, spontaneous intracranial hypotension, or intracranial infections amongst others. Careful history taking and physical examination remain the most important part in the assessment of the headache patient⁴. A thorough history should investigate the onset of headache, location, quality, and irradiation of pain, associated symptoms experienced before and during the headache, associated medical conditions, medication use, recent trauma or interventions. Examination should then target areas identified as abnormal during the headache history; fundus examination should be performed when symptoms suggest an increased intracranial pressure; in addition, a complete neurological assessment including level of consciousness, pupillary responses, cranial nerve testing, motor strength and sensorial testing, and signs of meningeal irritation is mandatory⁵. In headache patients with one or more “red flags” a diagnostic workup is indicated including blood tests, neuroimaging studies, and cerebrospinal fluid (CSF) examinations, which are selected depending on the patient's history and findings. Blood testing and inflammation markers (erythrocyte sedimentation rate, C-reactive protein) should be performed in all headache patients especially when an inflammatory or infective condition is suspected. In the emergency, non-contrast computed tomography (CT) is the preferred imaging study and is used to rule out hemorrhage while most patients should perform a magnetic resonance imaging (MRI) brain scan followed by CT/MRI angiography if brain vessel disease is suspected (such as dissection, aneurysms, and CVT). Lumbar puncture with CSF analysis may help to diagnose infection, SAH, tumour and disorders related to CSF hypertension or hypotension^{6,7}. Treatment and prognosis depend on the etiology of the headache. Prompt recognition and early treatment of secondary headache are essential to avoid some preventable complications⁷.

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