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Headache Profile of Female Patients Attending Tertiary Hospital Care Center.

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ABSTRACT:
Background: Headache, one of thecommon ailments which affect the human and one of the commonest disorders presenting to the neurologist and causes significant morbidity,especially many young women are affected. There is no definitive data about the prevalence and clinical profile of various headache types from our hospital. The present study was conducted to study the etiological and clinical profile of various headache types in female patients attending our hospital.
Aim and objective: To study clinical profile of various headache and aetiology of the headache infemale patient presenting to our hospital.
Method: Study included 100 patients presenting with complaint of headache in department of neurology KAPV Government medical college Trichy, Tamil Nadu,India. Patients were initially assessed using preform questionnaire plus thorough history taking and clinical examination and psychiatric evaluation whenever needed and investigations were done as and when required.Fordiagnosis of primary headache International Classification of Headache Disorder-3was used. some of the patients were evaluated in inpatient and some were evaluated outpatient basis.
Result:Among100female patientsevaluated for headache, 82 (82%) were diagnosed with primary headache and 18% (18) with secondary headache. Migraine was the commonest headache type (44%), followed by tension type headache (30%). In the migraine group migraine without aura (88.6%) and migraine with aura (11.3%). Among the secondary type headache, the most common was cerebral venous thrombosis. Headache was more common in reproductive age groups and stress was the most common precipitating factors.
Conclusion:Migraine was the most common causes of headache followed by tension type of headache. Stressneeds to be addressed in order to prevent and control primary headache. And all chronic headache patients should also undergo Brain imaging screeningin order to rule out secondary types of headaches which also have similar clinical characteristic features as that of primary headache.

I. INTRODUCTION

Headache disorders are ranked amongst the ten most disabling conditions in the world-by-World Health Organisation (WHO) [1]. Headache is one of the most common complaints encountered in general medical practice, accounting for 4% of outpatient physician visits. It has the dubious distinction of being the earliest recognized symptom of a wide spectrum of diseases [2]. Many publishedreviewssummarize the enormous social impact of headache, with absenteeism from work, reduced effectiveness when working with headache, the direct costs of medication and hospitalization, as well as its effect on the life of the patients, partners and family [3]. Migraine is a frequent cause of absence from work, and generally of social isolation.It is ranked 19th in the list of disability reasons worldwide [4]. This indicate headache causes significant morbidities and need to be address for betterment of life.

Method

Present study was conducted in the Department of Neurology KAPV Government medical college Trichy, Tamil Nadu, India between April 2021 to July 2021. Patient was selected randomly, daily 5 to 10 cases were assessed using even number selection, so every second case of headache patient was assessed using preformed questionnaire followed by thorough history taking and necessary clinical examination was carried out in all patients.

The questionnaire recorded the occupation, education, socio economic status, character of headache, associated symptoms, aggravating and relieving factors and sleep problem. Detailed examination with reference to general condition, refractory error, fundus examination, neck movements and CNS examination was done. Specialist opinion of ENT, Ophthalmology and Psychiatry was obtained whenever needed.

Relevant investigations including a hemogram, cerebrospinal fluid analysis including manometry and brain imaging (CTscan, MRI) were done wherever indicated and diagnosis were made, strictly following the criteria proposed by International Classification of Headache Disorders, 3nd edition. some of the patients were evaluated in inpatient and some were evaluated outpatient basis. Total of 100 cases were evaluated.

II. RESULT

This study was carried out in the Department ofNeurology, MGM Government hospital, Tiruchirappalli Tamil Nadu, India. A total of 100 patients were registered in the neurology clinics.

Distribution of different types headache among the female [table 1.]

Among 100 patients,82% (82) were diagnosed with primary headache and 18% (18) with secondary headache.

Out of 82 cases of primary headache, 44(44%) were diagnosed as having migraine and 30(30%) cases has tension type headachefollowed by trigeminal neuralgia 4 (4%), cluster headache 2(2%) and 2 (2%) case of New Daily Persistent Headache. Secondary headache was associated with cerebral venous thrombosis, idiopathic intracranial hypertension, sinusitiswas found in 10(10%), 6(6%) and 2(2%) respectively.

Among the migraineurs, 39(88.6%) patients were diagnosed as Migraine without aura while 5(11.3%)patients had episodic Migraine with aura.After migraine, second most common type of headache is tension type of headache in our study which constitute 30 % of all headache. Chronic tension type headache comprised the majority 20% while 10 % patients were diagnosed having probable tension type of headache.

Distribution of patients with different types of chronic primary headache is given in [table 2]

The median age of presentation for migraine and tension type of headache was 32 years(range 13-65years) and 35 years(range 14-65years) respectively.The median age of presentation for cluster headache was 35 years (range 28 -48 years) and this was higher for trigeminal neuralgia -55 years(range48-60 years).

Housewife formed the vast majority of the primary headache; 66 patients were homemaker by occupation followed by daily wager which constitutes 20% (20 patients) and 10 were students, others 4%. [table 3]

In the present study stress (emotional as well as physical) was the most common trigger(34%) for migraine. Other aggravating factors such as exposure to sun (29.5%), noise (18.1%), anger (22.7%), bath with cold water (11.36%), menstruation (11.36%)cold air (11.36%) and sleep irregularities (22.7%) commonly associated with migraine headache.For tension type headache, stress and sleep irregularities are most common triggers which account for 30% equally and others include anger (23.3%) and exposure to sun (20%). [TABLE 4]

Twenty-five of them has anxiety about their illnesses and five patients of migraine has family history of migraine.

In present study all patients belong to low socio-economic background and none passed class 12.

In the current study, Brain imaging reveals normal study in majority of patients with chronic primary Headache. Few patients revealed calcification, age-related atrophy which are insignificant.

Patient diagnosed with secondary headache 18(18%) presented with more than one month duration of headache and among the secondary type of headaches, the most common type was due to cerebral venous thrombosis in our study of headache in female and followed by Idiopathic Intracranial hypertension.

III. DISCUSSION

In the present study, out of 100 patients, primary headache was predominant type accounting for 82% as compared to Secondary headache seen only in 18%.Out of 82 cases of primary headache, 44(44%) were diagnosed as having migraine and 30(30%) cases has tension type headache, which constitute the greatest number of primary headaches.In many studies [5,6] migraine and tension type of headache are very common in female and these two are the most common primary headache in literature as well.

Age affected by headache ranges from 13 to 65 years. More than 80% of the patients who sought treatment were between 21 and 40 years of age, the most productive age group. The median age of presentation for migraine and tension type of headache was 32 years (range 13-65years) and 35 years (range 14-65years) respectively.Thus, the majority of patients with migraine and TTH presenting to our OPD were in their 3rd decade which is consistent with the reported peak incidence of migraine in the second and third decades [7].This study also Consistent with finding of AP Jain et al showed primary headache as the predominant type with a prevalence of 92.5% and remaining 7.5% with secondary headache and mostly female reproductive age group[8].

Majority of these patients were home maker. Similar distributions have been reported previously, so our study finding is Consistent with other studies.This study reflects the fact that headaches are very common in women [6,8-10].

Tension type headache has been observed in higher prevalence than migraine in most of the population-based studies [7].In our study migraine is the most prevalent type of headache, found in 44% cases followed by tension type headache which is 30% of the cases.However, in hospital-based studies reported from India, prevalence of migraine and TTH patients has been variable. In cases of migraine, it ranges from 13.6% to 78% [11,12]. This type of variation in prevalence of migraine among studies is largely due to differences in case definition and in age and gender distribution of study populations [13].

Migraine with aura ranges from 15 to 30% in western studies [13]. In our study 5 patients, (5%) had migraine with aura, which is less as compared to the West. However, this finding is almost equal to the study conducted in India where migraine with aura is 10.5% [14].

Tension type headache is second most common headache in our study (30%). The prevalence of tension-type headache is similar among Asian studies (15.6% to 25.7%) [15].

Other primary headaches include Cluster headache (2%), which is little more thanpopulation-basedstudy [16]. Diagnosis of NDPH was made in 2case (2%). In our study Trigeminal neuralgia was found to be 4% which is much higher than other studies [16,17].

Population based and subspecialty clinic-based studies have reported that stressful event or situation was trigger for migraine headache in 36% to 42% and 62% to 72%[18,19], which is similar to our study result (69.7%).

In our study we have less various type of primary headache and secondary headache with compared to other various study which could be due to a smaller number of sample size and less duration of the study.

In the current study, CT Brain/MRI Brain reveals normal study in majority of patients with chronic primary Headache. In present study among chronic headache patients, 18 patients were diagnosed with secondary headache, so all chronic headache patients should have at least CT Brain for screening as always done for acute onset headache.

In present study all patients belong to low socio-economic status groups and none of the them pass class 12.Thisfinding could be due to the reason that only low socio-economic status patients visit the government hospitals. And it could be triggering factor for initiation of headache as low financial status and low education is stressful factors for many people. So, improvement in education level among female and socio-economic status may prevent the prevalence of headache. Twenty-five migraine patients had anxiety which need to be addressed as it is significantly large in number and it could be one of the triggering factors for headache.

IV. CONCLUSION

The present study thus documents that Migraine is the most common headache disorder followed by TTH,seen mostly in women of reproductive age group and almost all had house wife as occupation. Stress is found to be the most common trigger for migraine as well as for TTH however light and sound also act as precipitating factors. And all chronic headache cases should also have Brainimaging to rule out secondary headache as in present study seventeen chronic patients had secondary headache.

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Appendix :

Table 1: Distribution of different types headache among the female. (n = 100)

Type of headache	female	Percentage (%)
Primary headache		
Migraine without aura	39	39
Migraine with aura	5	5
Chronic Tension headache	20	20
Probable tension type headache	10	1
Trigeminal neuralgia	4	4
Cluster headache	2	2
New daily persistent headache	2	2
Secondary headache		
CVT	10	10
IHH	6	6
sinusitis	2	2
Total	100	100

2. Distribution of patients with different types of chronic primary headaches (n=82)

Types of primary headache	ICHD-3 type	No patients	percentage
Migraine and its variation	1	44	53.65%
Chronic tension headache	2.3	30	36.58%
New daily persistent headache	4.10	2	2.4%

Chronic cluster headache	3.1.1	2	2.4%
Trigeminal neuralgia	13.1.1	4	4.8%
Total		82	100%

Table 3: Showing Occupation of Headache Patients

Type	House wife	Daily wager	Students	others
CVT	6	3	0	1
IHH	4	1	0	1
Sinusitis	0	1	1	0
Migraine	33	7	4	0
Tension headache	20	5	5	0
Cluster headache	0	2	0	0
Trigeminal neuralgia	2	1	0	1
NDPH	1	0	0	1
Total (100)	66	20	10	4

Table 4: Triggers in Migraine and TTH:

Triggers	Migraine (44)	TTH (30)
Stress (physical and emotional)	15	9
Sleep irregularities	10	9
Cold air	5	0
Anger	10	7
Bath with cold water	5	0
Noise	8	0
Sun exposure	13	6
menstruation	5	0