



## PRESENCE OF OBSESSIVE COMPULSIVE SYMPTOMS IN PRIMARY HEADACHE.

## General Medicine

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## ABSTRACT

**Aim:** To find out the prevalence of obsessive compulsive symptoms / disorder among patients of headache.

**Methodology:** Patients with headache diagnosed clinically at medicine out patients department were selected for the study. Yale-Brown Obsessive Compulsive Scale was applied to find out the prevalence and nature of obsessive compulsive symptoms.

**Results:** A total of 200 patients were participated and it was found that 8.5 % of headache patients had obsessive compulsive disorder.

**Conclusion:** The prevalence of obsessive compulsive disorder among the patients of headache was found to be 8.5 %.

## KEYWORDS

Compulsion, Obsession, Obsessive compulsive symptoms, headache.

## INTRODUCTION

Several studies have suggested that psychiatric co morbidities are very common with various headache-related conditions [1], additionally depression and anxiety remains the most prevalent comorbidities of primary headache [2]. In a study on Prevalence of obsessive-compulsive trait in patients with chronic migraine and medication overuse, 79 % in doubts in lifetime domain and 31.5 % in obsessive thoughts [3]. In yet another study, shows obsessive-compulsive symptoms as predictors of poor response to treatments in patients with chronic migraine and medication overuse [4]. The etiological mechanism of association between psychiatric disorders and headache syndromes is not known, but regardless of the mechanism of comorbidity, psychiatric conditions may influence patient's outcome and selection of headache treatment [5-7].

Patients with headache diagnosed as migraine and Tension headache have a high frequency of psychiatric comorbidity or psychopathological traits, the presence of OCD or OC traits may have implication in treatment choice and prognosis implications. In this view the aim of this study was planned to assess the prevalence of Obsessive compulsive symptoms in patients of headache, and compare their occurrence in between migraine and tension type headache.

## Methodology

The study was designed with purposive sampling among all consenting patients of primary headache, attending medicine outpatient department. These patients were asked to fill up a small self reporting personal socio demographic information form. Further they were screened with Y-BOCS checklist by an interviewer. The diagnosis of primary headache was further classified and subdivided into two groups, first group was consisted with patients diagnosed as migraine, another group was consisted with patients who were diagnosed as tension headache. The exclusion criteria were patients with unstable or life-threatening medical conditions, hypertension, secondary causes of headache, like sinusitis, fever, infective illness etc. Other exclusion conditions were comorbid diagnosis of psychiatric disorders, personality disorders, organic disorders or substance dependence syndromes.

## Procedure and Design

The current study was cross-sectional in design and did not include data collected at follow-up time points.

**Sample :** Participants were patients of either gender between the ages of 18 and 60 years visiting at medicine outpatient department with presenting complains of headache.

## Tools

**Socio-demographic Data Sheet:** The socio demographic data sheet included age, gender, religion, Years of education and socio economic

class of the patients. It also recorded provisional medical diagnosis for headache.

## Yale-Brown obsessive compulsive scale [8]

This scale rates the severity of obsessive compulsive symptoms. The scale is a clinician-rated 10-item scale. Each item is rated 0 (not significant) to 4 (extreme symptoms). Separate total for severity of obsession and compulsion is calculated. The result can be interpreted as 0-7, subclinical; 8-15, mild; 16-23, moderate; 24-31, severe; and 32-40, extreme severity.

## Statistical Analyses

The collected data of all patients was statistically analyzed, using Statistical Package for Social Sciences (SPSS, Inc., Chicago, Illinois) version 10.0. Data analysis included means and standard deviations for complete sample. Frequency analysis was used to determine the prevalence of Obsessive compulsive symptoms.

## RESULT:

The purposive sampling was completed a total of 200 patients, that consisted 38 % of male and 62 % of female patients. The other sample characteristics are tabulated in Table 1. We categorized the sample as per diagnosis of primary headache as into a migraine group and another group of tension headache. Out of 200 total sample size, 84 and 116 constituted the migraine and tension headache group respectively. The mean age of the migraine group (n= 84) was  $39.56 \pm 7.25$  years, and for tension headache group (n= 116) was  $42.14 \pm 9.65$  years ( $t = .541$ ,  $df=84$ ,  $p=.785$ ). The mean years of education were  $10.34 \pm 2.52$  years for migraine group and for tension headache group it was  $9.37 \pm 2.36$  years ( $t = -.323$ ,  $df=84$ ,  $p=.734$ ) (table -1). Majority of the sample were belonging to Hindu religion (81 %).

Out of total 200 sample size on total Y-BOCS only 17 patients scored above diagnostic cut off of 8 (8.5%) (8 patients each belonged to migraine group and 9 tension headache group, all scored within range of mild severity level of 8-15 score. On comparing mean Y-BOCS scores for obsession and compulsions separately, the mean Y-BOCS Obsession score was  $2.73 \pm 0.69$  and  $3.42 \pm 0.41$  was for migraine and tension headache group respectively ( $t = 2.421$ ,  $df= 84$ ,  $p= .026$ ). Whereas the mean Y-BOCS Compulsions score was  $2.21 \pm 0.17$  and  $2.32 \pm 1.02$  was for migraine and tension headache group respectively ( $t = -.849$ ,  $df= 84$ ,  $p=.561$ ). (table 1)

## DISCUSSION:

This study was aimed to estimate the association of obsessive-compulsive symptoms among patients with primary headache. But beyond association we found a prevalence of 8.5% of patients suffering from obsessive-compulsive disorder. These 17 patients scored above cut off point on Y-BOCS total score, this emphasizes the importance of detailed psychiatric assessments of all patients with

headache. Ours result indicates slightly higher prevalence of OC symptoms among tension type headache, however both the migraine group and tension headache group exhibited higher prevalence than general population. We found a prevalence of 8.5 % in our study, which is higher than previous studies among general population as well as among population of patients suffering from headache. [9]

However the disorder level of obsession and compulsion were almost equally distributed among tension type headache and migraine in this present study. Depression and obsessive compulsive disorder are etiologically known to be serotonin disturbance and both responds well to serotonin reuptake inhibitors; these two conditions are most frequent co morbid conditions to each others [10]. Hence tension headache is expected to be associated with OC symptoms, in our

study we found that the mean Obsessive symptoms score on Y-BOCS was significantly higher for tension headache compared to migraine; but compulsive scores were almost similar for both group. There are possible associations of pathogenic mechanisms between tension headache and OC symptoms as well as between migraine and mood disorders. These pathogenic mechanisms include a decrease of platelet serotonin concentrations, an increase of urinary 5-hydroxytryptamine and increase of 5-hydroxyindole acetic acid [11].

In conclusion prevalence of obsessive-compulsive disorder among the headache patients were found to be 8.5 %, and there was higher mean obsessive score for the group of tension headache type, in comparison to migraine headache.

**Table : 1**

		Migraine (n=84)	Tension Headache (n= 116)	chi square	df	Sig. (2-tailed)
Gender	Male	32	44	.897	1	.564
	Female	52	72			
		Migraine (n=84)	Tension Headache (n= 116)	t	df	Sig. (2-tailed)
Age		39.56 ± 7.25	42.14 ± 9.65	-.541	84	.785
Years of education		10.34 ± 2.52	9.37 ± 2.36	-.323	84	.734
Total Y-BOCS Obsession Score		2.73 ± 0.69	3.42 ± 0.41	2.421	84	.026
Total Y-BOCS Compulsion Score		2.21 ± 0.17	2.32 ± 1.02	-.849	84	.561

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