

Profile of Conversion Disorder patients presenting at Emergency Medicine department of a tertiary care hospital in Ahmedabad.



Medicine

KEYWORDS:

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ABSTRACT

Objective:

To describe the presenting symptoms and related features of Emergency Department (ED) patients diagnosed as having conversion disorder.

Methods:

Secondary data analysis was carried out of the records of ED patients who were diagnosed with conversion disorder. Cases from March 2016 to October 2016 at a tertiary care hospital in Ahmedabad with a residency program in emergency medicine were reviewed for patient's age, gender, presenting signs and symptoms, ED diagnostic evaluation and disposition.

Results:

Of 37 patients who were diagnosed with conversion disorder, 29 were women and 8 were men. More than half (22) were diagnosed as having conversion disorder in the ED, and of those patients, 14 were treated on outpatient department (OPD) basis. Patient age ranged from 12 to 54 years, with a mean age of 25.56 years. Most clinical symptoms mimicked neurologic disorders (Seizure- like activity, paresis, loss of consciousness, etc). Twenty (54%) patients had computed tomography of the head and three (8%) patients had magnetic resonance imaging of the head.

INTRODUCTION

Conversion disorder (functional neurological symptom disorder) is classified as one of the somatic symptom and related disorders in the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association, Fifth Edition (DSM-5).^[1,2,3] Although defined as a condition that presents as an alteration or loss of a physical function suggestive of a physical disorder, conversion disorder is presumed to be the expression of an underlying psychological conflict or need.

Though many psychiatric and medical advances have been made, physicians are frequently puzzled when evaluating patients subsequently found to have a conversion disorder. Since attendees of emergency department (ED) patients usually perceive the problems as being urgent and related to a true medical condition, making a diagnosis of conversion disorder is difficult and stressful as repercussions of making a misdiagnosis may be severe. Emergency physicians (EPs) therefore must diligently evaluate patients with a wide range of signs and symptoms. When no clear medical problem can be identified to explain the patient's symptoms, the diagnosis of conversion disorder (or hysterical neurosis, conversion- type) must be considered. Hysteria patients constitute a major proportion of psychiatric patient population in developing countries^[4,6]. In India, high occurrence of conversion disorder has been reported in young adults, and significantly higher in females^[7].

This study is an effort to know the various types of clinical presentations and evaluations of patients who presented in the ED and were subsequently diagnosed (in the ED or in the hospital) as having conversion disorder.

METHODS

Study Design

We carried out a secondary data analysis where in registers and case records maintained at the ED and Medicine departments were reviewed. Firstly, cases which had presented at the ED between March, 2016 and October, 2016 and were subsequently diagnosed as having conversion disorder - either in the ED or the Medicine department (after being referred from ED) - were identified. Data related to these identified cases was extracted from the registers and case records and was further analyzed.

Patient Population

All cases had been managed from March 2016 to October 2016, at a tertiary care hospital in Ahmedabad with a residency program in emergency medicine. By record review, all patients who had ED or subsequent in-hospital diagnoses of conversion disorder were evaluated. Patients were excluded if they had been admitted directly to the hospital or merely triaged through the ED without full evaluation and assessment.

Record Review

The registers and case records were reviewed for patient age, gender, presenting symptoms, ED diagnostic evaluation and ED disposition. Descriptive statistics were used.

RESULTS

A total of 37 patients, who were subsequently diagnosed as having conversion disorder, presented in the ED between March, 2016 and October, 2016.

Table 1: Sex wise distribution

Sex	Number of patients	Percentage
Male	8	21.6%
Female	29	78.4%
Total	37	100%

Table 1 shows the sex distribution of patients who were included in the study. Of the 37 patients diagnosed as having conversion disorder, 29 (78.4%) were women and 8 (21.6%) were men.

Table 2: Age wise distribution

Age (in years)	Male	Females	Total
12-20	2	8	10 (27%)
21-30	3	14	17(46%)
31-40	3	4	7(18.9%)
>40	0	3	3 (8.1%)

Table 2 shows the age wise distribution of patients who were included in the study. The ages ranged from 13 to 54 years, with a mean age of 25.56 years. A majority of patients were in the age group of 21-30 years (46%) followed by 12-20 years (27%).

Table 3: Diagnostic Studies

Study	Number of patients
ABG analysis	2
Chest X-ray	6
Head computed tomography	20
Head magnetic resonance imaging	3
Electroencephalography	2
Laboratory studies (CBC, Urinalysis, serum electrolytes	23

Table 3 depicts the different diagnostic evaluations which were carried out on the patients. Twenty three (62.2%) patients were admitted for a complete work up whereas fourteen (37.8%) patients were managed on OPD basis. The diagnosis of conversion disorder was established in the ED for half the patients and during hospitalization for the remainder. Admitted patients had complete blood counts (CBCs), urinalyses, and serum electrolyte measurements in the ED. Other diagnostic studies, as listed in Table 3, were used to evaluate the patients.

Table 4: Presenting symptoms

Symptoms	Frequency	Percent
Seizure like activity, syncope, unresponsiveness	27	73%
Paresis or limb paralysis	7	19%
Aphonia/Dysphonia	8	21.6%
Hyperventilation	8	21.6%
Multiple Vague symptoms	2	5.4%

Table 4 depicts the frequency distribution of various presenting signs and symptoms among patients of conversion disorder. Few symptoms were seen to co-exist in these patients. Seizure like activity, syncope and unresponsiveness were the most common type of clinical presentation (73%). Hyperventilation and aphonia/dysphonia was seen in 21.6% of patients, followed by paresis or limb paralysis seen in 19% of patients.

DISCUSSION

The results of this study show that conversion disorder can occur at any age, being most common in young adults. A majority of our patients were in the 21-30 years age group. These findings are similar to the findings by Vyas et al^[7], Bagadia et al^[8] and Choudhury et al.^[9] Earlier studies^[13,14,15] leave no doubt about the female preponderance in conversion syndromes, and the present study confirms this. Females were 4 times more likely to present with a conversion disorder as per our study.

Most of our patients had presented with neurologic symptoms (Table 4). Classic symptoms are pseudo seizures, paresis, limb paralysis, and aphonia or dysphonia. This was consistent with many other studies^[10-12]. Pseudo seizures was found to be the most common presenting symptom in our study which is similar to the findings by Pehlivanurk et al^[18] and Malhi et al^[19]. Hyperventilation was found in 1/5th patients. We also found that many patients had more than one conversion symptom at the same time.

Although a diagnosis of conversion disorder cannot be based upon a laboratory study, a thorough evaluation is needed to exclude organic illness. Emergency physicians should always keep in mind possibility of an organic etiology since the diagnosis of conversion disorder is one of exclusion. In our study about half of the patients underwent a Head Computed Tomography, which was comparable to a study by Dula et al^[17] where 40% of the patients underwent a Head Computed Tomography. This similarity is because of the high number of patients presenting with neurological symptoms in both studies.

In our study, 14 patients were treated on OPD basis, all patients had received psychiatric consultation before they were released home.

It is important for Emergency physicians not to let suspicion for

conversion disorder hinder a thorough evaluation of all of the patient's complaints. They should also keep in mind that the diagnosis of conversion disorder should not be made only on the basis of a negative work up. Errors in diagnosis do occur and a false positive rate of 25% has been reported^[10]. If conversion disorder is suspected after the initial evaluation, the diagnostic criteria for conversion disorder should be reviewed. The DSM-5 diagnostic criteria for conversion disorder are as follows:^[1]

- One or more symptoms of altered voluntary motor or sensory function.
- Clinical findings provide evidence of incompatibility between the symptom and recognized neurological or medical conditions.
- The symptom or deficit is not better explained by another medical or mental disorder.
- The symptom or deficit causes clinically significant distress or impairment in social, occupational, or other important areas of functioning or warrants medical evaluation.

If the diagnosis is still not clear, then hospital admission may become necessary for carrying out further evaluation and coming to a definitive diagnosis.

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