

ASSOCIATION OF DEPRESSION WITH DISSOCIATIVE CONVULSIONS

Amer Abbas, Mian Iftikhar Hussain, Rabia Busri, Mehreen Shah

ABSTRACT

Background: Depression co occurs with other psychiatric and medical illnesses. It causes functional impairment and adversely affect their outcome. The purpose of this study is to see the association of depression with dissociative convulsions.

Materials and Methods: It is a descriptive cross sectional study conducted at Iftikhar Psychiatric Hospital, Peshawar, from January 2013 to September 2013. A total of 115 admitted Conversion disorder patients were included in this study. Depression was assessed using Hamilton depression rating scale. Demographic data and illness related data was recorded on a semi structured proforma. Data was analyzed using SPSS 16.

Results: 54.7% of cases presented with dissociative convulsions, 81.7% of conversion patients suffered from depression. Depression was strongly associated with dissociative convulsions. 80.9% of cases presenting with dissociative convulsions suffered from moderate to severe depression.

Conclusion: Majority of conversion patients suffered from depression. Depression is associated with dissociative convulsions. Co morbid depression can adversely affect out come and needs to be treated

Key Words: Conversion disorder, Hamilton Depression Rating Scale, Depression.

INTRODUCTION

The principal features of conversion disorder are physical symptoms occurring in the absence of organic illness. They often seem to represent the patient's concept of physical disorder which may be at variance with physiological or anatomical principals¹.

Conversion disorder is of sudden onset, often preceded by a stressful life event¹. Conversion disorder patients present with variety of symptoms including convulsions, aphnia, amnesia and sensory symptoms². They can also present with convulsion or sensory symptoms^{2,3}. It is more common in young females. Physical and sexual abuse during childhood can predispose an individual to develop conversion disorder³. Similarly poor socioeconomic status and large family size can contribute to conversion symptoms^{2,3,4}.

Depression can co occur with other medical and psychiatric disorders^{5,6,7}. Severe depression co morbidity adversely affects health, causes functional impairment and lead to greater number of health care visits, thus increasing the health care costs⁸. It interferes with ability of the sufferer to do his job effectively and is responsible for increased number of days lost due to disability. Greatest loss is in those suffering from persistent depression⁹. It also causes poor response to treatment, high rate of recurrence and worsens out come^{10,11}

Studies have shown that they remain undiagnosed in significant number of cases causing increase in symptom load and adversely affecting the outcome^{8,12,13,14,15,16}. Most of these cases are inadequately treated⁸.

In our country, relatively limited research has been done to study different aspect of Conversion disorder. The purpose of this study is to assess association of depression with dissociative convulsions.

MATERIAL AND METHODS

This is a descriptive study carried out on newly diagnosed dissociative disorder patients admitted in private health care facility, Iftikhar Psychiatric hospital. This study was carried out from January 2012 to December 2012. Cases were diagnosed according to International Classification of Diseases (ICD -10) diagnostic criteria. Subjects were selected through purposive sampling. 115 patients were included in this study. Those who refuse to give informed consent or had a past history of depression were excluded from this study.

They were interviewed in comfortable setting. Data was collected using semi structured proforma. Depression was assessed by using Hamilton rating scale for depression. Data was analyzed using SSPS 16. Factor correlation was assessed by using one way anova.

RESULTS

In this study 29.5 % were males and 70.4% were females. 76.5% belonged to rural and 23.5% belonged to urban areas.

Address for correspondence:

Dr Amer Abbas

Department Psychiatry

Cell: 0321-5887247

E-mail: amerabbasqureshi@gmail.com

Sample Characteristics

FACTORS	FREQUENCY
Age	Mean age 24.4 years with 7.7 as standard deviation
Gender	
Male	34
Female	81
Symptom presentation	
convulsions	63
Sensory	18
Motor	13
Mixed	21
Area Of residence	
Rural	88
Urban	27
Severity of depression	
None	21
Mild	19
Moderate	36
Severe	39

Depression was found to be more common in those suffering from dissociative convulsions. In fact, more than 80 % of patients having dissociative convulsions suffered from moderate to severe depression. There could be several reasons for that such as the dissociative convulsions are associated with increased symptom severity, increased need for hospitalization and lower quality of life for the patients. All these factors increase distress of not only patients but also their care givers.^{17,18}

In this study majority of patients presenting with conversion symptoms were women (70.4%) Conversion symptoms were found to be two times more common in women than men. However this ratio is much higher in other studies According to Deveci A et al, for every man suffering from conversion disorder up to 6 women are diagnosed as having conversion symptoms²⁰. Sajid et al in his study also reported conversion disorder to be more common in young women²

Depression co morbidity was also found to be higher in women. Similar findings were reported in previous research. In general population male to female ratio for both anxiety and depression is 1 to 2^{9,21,22,23}. The cause of this difference is thought to be difference in the level of hormones between the two and the way men and women respond to stress; similarly suicide

Relationship of Depression with conversion symptoms

Conversion Symptoms	Mild Depression	Moderate Depression	Severe Depression	None
Convulsions	7	22	29	5
Sensory	5	4	3	6
Motor	3	4	2	4
Mixed	4	6	5	6
Total	19	36	39	21

54.7% of cases presented with dissociative convulsions, 18% suffered from sensory symptoms and 13% presented with dissociative motor deficits. 18.26% patients had mixed presentation.

81.7% of conversion patients suffered from depression .16.5% suffered from mild depression,31.3 % suffered from moderate depression and 33.9 % suffered from severe depression. Depression was strongly associated with dissociative convulsions.80.9% of cases presenting with dissociative convulsions suffered from moderate to severe depression.

DISCUSSION

In this study majority of conversion disorder patients suffered co morbid depression. This finding is consistent with the results of previous studies carried out in Pakistan. According to Khattak et al, depression co morbidity in conversion patients is 73%^{7,17,18,19}

attempts are more frequent in women.²²

There are also social reasons for this difference. In our society women have to face many social stressors like disturbed relationship with their husbands and in-laws. Similarly lot of Pakistanis men work abroad and their wives remain with their in-laws. These men visit their families after many months and years. This prolonged separation causes psychological distress and can contribute to the development of conversion symptoms in their wives. Death of the spouse can cause severe mental and psychological stress especially in women with poor social support making them prone to develop psychiatric illnesses. All these factors can contribute to the development of conversion symptoms²⁴

Majority of conversion patients included in this study belonged to rural areas. Co morbidity was also higher in these cases. . This finding is also consistent with previous research²¹. Most of rural areas of Pakistan are under developed lacking basic facilities. Psychi-

atric illnesses like depression are common in areas with lower level of education, poor social support and limited access to health facilities. Death rate is higher in younger population of rural areas²⁵. Living in such disadvantaged and underdeveloped areas can hamper access to health care facilities and can predispose an individual to develop psychiatric illness^{26,27}

Mean age of individuals included in this study is 24.4 years with 7 as standard deviation. This is consistent with previous research. According to Maqsood N, et al 2005 the mean age of conversion patients is between 22 and 24 years.²⁸

One of the reason for this could be that older individuals can regulate their emotions better than younger patients²⁹ In our society youngsters have to face Social and emotional problems. They have difficulty communicating their wishes and desire to their parents this lead to conflict with parents'. Similarly they may have difficulty adjusting to their work. Failure in examination and work can also cause psychological distress²⁴

CONCLUSIONS

Depression co morbidity is high in conversion disorder patients, especially in young married females, belonging to rural areas and presenting with dissociative convulsions, which if detected and treated earlier, can improve out come and reduce health care cost.

REFERENCES

- Sadock BJ, Sadock VA. ed's. Comprehensive Textbook of Psychiatry. 8th ed. Somatoform disorders. Philadelphia:Williams and wilkins,2005:1814
- Sajid WB, Rashid S, Jehangir S. Hysteria: a symptom or a syndrome. Pak Armed Forces Med J 2005; 55:175-9.
- Foote B, Smolin Y, Kaplan M, Legatt, Lipschitz D. Prevalence of dissociative disorders in Psychiatric outpatients. Am J Psychiatry 2006; 163: 623-9.
- Khan NS, Ahmad S, Arshad N. Birth order, family size and its association with conversion disorder. Pak J Med Sci 2006; 22: 38-42.
- De-Waal MW, Arnold IA, Eekohof JA, Hemert AM. Somatoform disorders in general practice: prevalence, functional impairment and co morbidity with anxiety and depressive disorders. Br J Psychiatry 2004; 184: 470-6.
- Maj M. Psychiatric co morbidity: an artifact of current diagnostic systems .Br J Psychiatry 2005; 186:182-4.
- Khan MNS, Ahmed S, Arshad N, Ullah N ,Maqsood N. Anxiety and depressive symptoms in patients with conversion disorder. J Coll Physicians Surg Pak 2005; 15:489-92
- Katon, Wayne J, Richardson, Laura, Russo, Joan, et al. Quality of mental health care for youth with asthma and co-morbid anxiety and depression. Medical Care 2006; 44:1064-72.
- Mogga S, Prince M, Alem A, Kebede D, Stewart R, Glozier N, Hotopf M. Outcome of major depression in Ethiopia .Population-based study. The Br J Psychiatry 2006; 189: 241-6.
- Samaan Z, Farmer A, Craddock N, Jones L, Korszun A, Owen M, McGuffin P. Migraine in recurrent depression: case-control study. The Br J Psychiatry 2009; 194: 350-4.
- Kim JM, Stewart R, Kim SW, Yang SJ, Shin IS, Yoon JS .Vascular risk factors and incident late-life depression in a Korean population . The Br J Psychiatry 2006; 189: 26-30.
- Perlick DA, Miklowitz DJ, Link BG, Struening E, Kaczynski R, Gonzalez J, Lauren N,et al. Perceived stigma and depression among caregivers of patients with bipolar disorder. The Br J of Psychiatry 2007; 190: 535-6.
- Saarni SI, Suvisaari J, Sintonen H. Impact of psychiatric disorders on health related quality of life: general population survey. Br J Psychiatry 2007; 190:326-32.
- Van-Hout HP, Beekman AT, De Beurs E, Comijs H, Marwijk HV, De-han M et al. Anxiety and the risk of death in older men and women. Br J Psychiatry 2004; 185:399-404.
- Andresescu C, Lenze EJ, Dew MA, Begley AE, Muslant BH, Domborovski AY. Effect of co-morbid anxiety on treatment response and relapse risk in late life depression: Controlled study. Br J Psychiatry 2007; 190:344-9.
- Chishlom D, Diehr P, Knapp M, Patrick D, Treglia M. Depression status, medical co-morbidity and resource costs: evidence from an international study of major depression in primary care (LIDO). Br J Psychiatry 2003; 183:121-31.
- Szaflarski JP, Szaflarski M, Hughes C, Ficker DM, Cahill WT, Privitera MD. Psychopathology and quality of life: psychogenic non-epileptic seizures versus epilepsy.Med Sci Monit. 2003 Apr;9(4):CR113-8.
- Szaflarski JP, Hughes C, Szaflarski M, Ficker DM, Cahill WT, Li M, Privitera MD.Quality of life in psychogenic nonepileptic seizures.Epilepsia. 2003 Feb;44(2):236-42.
- Khattak T. Sociodemographic features, affective symptoms and family functioning in hospitalized patients with Dissociative disorder (convulsion type).J Pak Med Assoc 2007;57:23-6
- Deveci A, Taskin O, Dinc G, Yilmaz H, Demet MM, Erbay-Dundar P, Kaya E, Ozmen E. Prevalence of pseudoneurologic conversion disorder in an urban community in Manisa, Turkey. Soc Psychiatry Psychiatr Epidemiol. 2007; 42: 857-64.
- Sadock BJ, Sadock VA. ed's. Synopsis of Psychiatry. 10th ed. Somatoform disorders. Philadelphia:Williams and wilkins, 2007:638-9.

22. Oquendo MA, Bongiovi-Garcia ME, Galfalvy H. Sex differences in clinical predictors of suicidal acts after major depression: a prospective study. *Am J Psychiatry* 2007; 164: 134–41.
23. Sadock BJ, Sadock VA. ed's. *Synopsis of Psychiatry*. 10th ed. Mood disorders. Philadelphia:Williams and Wilkins, 2007:580-7.
24. Irfan N, Badar A. Top ten stressors in the hysterical subjects of Peshawar J Ayub Med Coll Abbottabad 2002;14: 38-41
25. O'Reilly G, O'Reilly D, Rosato M, Connolly S. Urban and rural variations in morbidity and mortality in Northern Ireland. *BMC Public Health* 2007, 7:123
26. Brown AF, Pebley AR. The Relationship Between Neighborhood Characteristics and Self-Rated Health for Adults With Chronic Conditions. *American Journal of Public Health* 2007; 97:926-32.
27. Van Gelder BM, Tijhuis M, Kalmijn S, Giampaoli S, Nissinen A, Kromhout D. Marital status and living situation during a 5-year period are associated with a subsequent 10-year cognitive decline in older men: The Fine Study. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 2006;61: 213-19
28. Maqsood N, Ali W, Ahmad I, Rehman W, Niaz N. The hysteria; conversion disorders. *Professional Med J* 2006;13:303-9.
29. Uchino BN., Berg, CA., Smith, TW., Pearce G, Skinner M. Age-related differences in ambulatory blood pressure during daily stress: Evidence for greater blood pressure reactivity with age. *Psychology and Aging*. 2006; 21: 231-9.

ONLINE SUBMISSION OF MANUSCRIPT

It is mandatory to submit the manuscripts at the following website of KJMS. It is quick, convenient, cheap, requirement of HEC and Paperless.

Website: **www.kjms.com.pk**

The intending writers are expected to first register themselves on the website and follow the instructions on the website. Author agreement can be easily downloaded from our website. A duly signed author agreement must accompany initial submission of the manuscript.