

Delusional Parasitosis: An Analysis of 177 Cases from a Tertiary General Hospital

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ABSTRACT

Introduction: Delusional parasitosis (DP) is a form of monohypochondriacal psychosis characterized by a feeling that there are parasites crawling beneath the skin and is seen in rarely in psychiatric or primary care practice. The disorder has poor prognosis with a varied course and multiple relapses. The present paper reports an analysis of 177 cases of delusional parasitosis seen in a tertiary general hospital over the last 11 years.

Material and methods: The present study is an analysis of 177 cases of DP that presented to the psychiatry department of a tertiary general hospital over the past 11 years and the data has been analyzed using a semi-structured proforma and descriptive statistics.

Results: The mean age of the sample was 34.6 ± 21.3 years and the mean age of onset of the disorder was 28.3 ± 17.1 years. The mean duration of illness of the sample was 3.9 ± 10.3 years. 103 (58.19%) had a magnetic resonance imaging of the brain done which was within normal limits. 56 (31.63%) patients had repeated neuroimaging investigations like EEG, MRI and CT Scans done which were also all within normal limits. Most patients were treated with Risperidone and Aripiprazole while few were treated with Pimozide, Haloperidol and Amisulpride. 43 (24.29%) patients received a course of electroconvulsive therapy (ECT) as well in addition to medications.

Conclusion: DP though rare is seen in clinical practice and further longitudinal studies are needed to establish with greater certainty facts about the course and prognosis of the disorder.

Keywords: Delusions, Delusional Parasitosis, Risperidone, Pimozide, Course, Psychosis.

The disorder has been reported as a primary disorder or as a part of the symptoms of schizophrenia and also in patients with dementia and late onset psychosis.⁵ The disorder may also be seen as a part of organic psychotic processes seen in Vitamin B12 deficiency, pellagra, multiple sclerosis, parietal lobe lesions, hepatitis and in patients with leprosy or pre-existing skin conditions.⁶

Many patients with delusional parasitosis are not amenable to their thinking being modified with any amount of reasoning. They collect fibers and filaments and various other paraphernalia to prove that they have parasitic infestations. In the bygone era, they would bring these specimens in matchboxes and this was called the famous 'matchbox sign' in DP.⁷ Many case reports abound literature with respect to DP and multiple case series of the same exist.⁸⁻¹⁰ The present paper reports an analysis of 177 cases of delusional parasitosis seen in a tertiary general hospital over the last 11 years.

MATERIAL AND METHODS

The present study is a retrospective chart review of 177 cases of delusional parasitosis seen in a tertiary general hospital over a period of last 11 years i.e. 2008-2018. The out patient case records of these patients were examined and data on age of onset, gender, socio-demographic variables, factors related to DP, relevant medical and psychiatric history, duration of illness, treatment given and improvement were noted in a semi-structured proforma. Investigations done and details of dermatological reference was also noted. Medical and dermatological comorbidity if any was made note of. The data was analyzed using descriptive statistics like frequency and percentage and was presented. Cases where DP was the primary presentation were only included in the study and those with DP secondary or as symptom of a major psychiatric disorder were excluded from the analysis. The

INTRODUCTION

Delusional Parasitosis (DP) has been a disorder that has intrigued psychiatrists since the past 100 years. The intractable nature and variable course of the disorder has always made treatment difficult whether medical or psychotherapeutic.¹ The disorder has been referred to by various names in literature and this ranges from 'delusion of parasitosis' to 'Acarophobes – where delusional parasitosis is seen in patients that have a phobia of developing scabies after having been in contact with a patient having the disorder' and has also been referred to as 'parasitophobic neurodermatitis'.² The term delusional parasitosis in psychopathology was given by Wilson and Miller in 1946, and explains the construct as a single hypochondriacal, delusional system that the patient is infested with insects.³ DP is one of the commonest delusional disorders seen in clinical practice.⁴

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study was a retrospective chart review and did not involve live human subject interviews and was approved by an internal department review board.

RESULTS

The mean age of the sample was 34.6 ± 21.3 years and the age range were 22-56 years. The mean age of onset of the disorder was 28.3 ± 17.1 years. 159 (89.83%) subjects were male. The subjects nearly equally belonged to the Hindu and Muslim religion. Most subjects were employed and all female patients were housewives. The mean duration of illness of the sample was 3.9 ± 10.3 years. The range of duration of illness varied from 3 months to 16 years. All patients had been to the dermatology department of the hospital and were referred to psychiatry. Some had also been to the internal medicine department prior to psychiatry.

103 (58.19%) had a magnetic resonance imaging of the brain done which was within normal limits. 56 (31.63%) patients had repeated neuroimaging investigations like EEG, MRI and CT Scans done which were also all within normal limits. The most common psychiatric comorbidity reported was

tobacco use disorder. Few patients had comorbid psychiatric disorders like major depressive disorder and alcohol use disorder. The major medical conditions noted were hypertension and diabetes while dermatological conditions noted were acne and eczema. Most patients were treated with Risperidone and Aripiprazole while few were treated with Pimozide, Haloperidol and Amisulpride. Most tolerated the drugs well. Some patients were on more than one drug as well as a combination was used. 43 (24.29%) patients received a course of electroconvulsive therapy (ECT) as well in addition to medications. Details of various aspects of the DP in the sample are presented in Table 1.

DISCUSSION

Data on the epidemiology and clinical prevalence of DP is unknown and studies and centers have reported varied prevalence based on their geographical location and cultural factors. In our center, we saw 177 cases over a period of 11 years which is in keeping with the average number of cases reported in other studies.⁹⁻¹⁰ The age group and mean age is also in keeping with these studies. DP has known to have a long standing duration of being untreated or visiting multiple specialties before psychiatric consultation is sought which is seen in our study as well.¹¹ Most patients were male in our study while an equal prevalence in males and females has been reported worldwide.¹² Few patients in our study demonstrated the matchbox sign which is in keeping with other studies¹² while many patients also picked at their skin and had excoriation marks that has also been reported in previous reports.¹³

In keeping with world literature Risperidone was the main drug used for patients in our study while other antipsychotics were also used.¹⁴ Some patients received ECT as well and that has probably to do more with a positive and proactive attitude that the department has with regard to the use of ECT in general. The main body areas involved were the eyes, scalp and forearms as seen in previous reviews on DP.¹⁵ Relapses were noted in the case histories of patients as seen in the course and prognosis of DP. This was coupled with a good response to medications following which they were stopped and relapses happened. Most patients with DP show a good response to medication and this corroborates with literature worldwide.¹⁶

CONCLUSION

The present case series is one of the largest case series on DP reported from Indian patients and provides some epidemiological and clinical insight into the disorder. Longitudinal studies on DP would probably yield better insights and are a must for future research. The rare occurrence of the disorder and poor follow up on the part of the patients serves as a deterrent for such efforts.

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Socio-Demographic Parameter	N (%) or Mean \pm SD (n=177)
Mean Age	34.6 \pm 21.3 years
Mean Age of Onset of DP	28.3 \pm 17.1 years
Mean Duration of Illness	3.9 \pm 10.3 years
Age Range	22-56 years
Gender	
Male	159 (89.83)
Female	18 (10.17)
Neuroimaging and Investigations (Overlapping Data)	
MRI Brain	103 (58.19)
Repeat MRI, EEG, CT Scan	56 (31.63)
Characteristics of Delusional Parasitosis	
Scalp	86 (48.58)
Eyes	33 (18.64)
Forearm and Legs	36 (20.33)
Multiple sites	22 (12.42)
Matchbox Sign	27 (15.26)
Psychogenic Excoriation	57 (32.21)
Acne	12 (6.77)
Eczema	19 (10.73)
Presence of Hypertension	31 (17.52)
Presence of Diabetes	21 (11.86)
Major Depression	27 (15.26)
Tobacco Use Disorder	87 (49.16)
Alcohol Use Disorder	39 (22.03)
Psychopharmacological Treatment Given (Overlapping data)	
Risperidone	122 (68.92)
Pimozide	22 (12.42)
Aripiprazole	53 (29.94)
Amisulpride	26 (14.68)
Haloperidol	26 (14.68)
Multiple medication	33 (18.64)
ECT	43 (24.29)

Table-1: Characteristics of the sample with Delusional Parasitosis

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