

Case Report

DELUSIONAL DISORDER OF SNAKE INFESTATION – A DIAGNOSTIC DILEMMA

K Priya Nayak^{1*}, Safeekh A T²

¹ Assistant Professor, Department of Psychiatry, Father Muller Medical College, Mangalore

² Professor and HOD, Department of Psychiatry, Father Muller Medical College, Mangalore

*Corresponding Address: drnayakp@gmail.com

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ABSTRACT

Delusional infestation is a condition where one has a false unshakable belief that his or her body has been infested by living organisms, usually large parasites. We present a case with the delusion of snake infestation as the only psychotic symptom without any other psychotic or mood symptoms. The site of infestation and the type of parasite involved makes it an unusual clinical presentation.

Keywords: Delusional infestation, Snake infestation, Parasitosis, Aripiprazole

INTRODUCTION

Delusional infestation is a condition where a person believes that his or her body is infested with living organisms. Delusional infestation has been observed in patients with persistent delusional disorder, as well as being part of psychopathology in patients with schizophrenia, mood disorders, substance use disorders and general medical conditions.¹ Here we present a case of atypical presentation of delusional infestation of snakes following sexual intercourse.

CASE REPORT

Mrs KT, a 47-year-old lady, visited the outpatient department of psychiatry with the history of being infested by snakes. She was

a high school educated homemaker with two children. She had a good interpersonal relationship with her husband prior to the onset of illness, and sexual life was reported to be satisfactory. She presented with a decrease in her food intake and difficulty in breathing and attributed it due to the presence of snakes in her stomach. Historically there were no manic or depressive symptoms. She was otherwise a healthy postmenopausal lady who did not have any significant past or family history. Her socio-occupational functioning was intact.

On examination, the patient was well-groomed with anxious affect. Her psychomotor activity was normal with adequate spontaneous talk. She believed that

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the urologist who had operated her husband five years ago had injected eggs of the snake through the penis during the procedure. She did not have any persecutory ideas against the urologist. The eggs had entered her body following sexual intercourse with her husband. The eggs of the snake hatched in her body. It pierced her uterus and reached her abdomen and grew. The snakes further multiplied and had grown up, causing difficulty in eating. She also explained that these snakes in her abdomen exert pressure, which causes difficulty in taking food. There were times where the snake raised its hood, which caused difficulty in breathing. She was not convinced with the ultrasonography of the abdomen as she believed it might not have detected the snakes as they were constantly in motion. She insisted on surgical intervention as she believed it was the only way to remove the snakes. She did not have formal thought disorder, perceptual abnormality or impairment in her cognitive functions. She was provisionally diagnosed with delusional disorder. She was investigated with routine blood investigations as well as MRI brain. Investigations did not reveal any abnormality, and she was treated with aripiprazole. The patient was regular to follow up where aripiprazole was increased up to 20mg, and the delusions decreased in intensity within the second follow up, which was after six weeks of initiation of treatment. The patient was subsequently lost to follow up.

DISCUSSION

Appropriate diagnosis is necessary for communication, treatment and prognostication purposes. But in the current situation, the dilemma was in the diagnosis of the disorder itself, which may further change the prognosis. The delusion being bizarre

itself supports the diagnosis to be schizophrenia, at least according to ICD 10 guidelines. However, the other features like a single delusion, which is well- systematised, persistent for three-months with acting out on delusions without impairment of social functioning are more in favour of delusional disorder rather than schizophrenia. DSM-5 has solved this dilemma by not giving prominence to the bizarre nature of the delusion in the diagnosis of schizophrenia.^{2,3}

But when the socio-cultural background of the patient and her knowledge is considered, the delusions were not culturally inappropriate or impossible. Snakes play a role in Indian mythology and religion. The site through which the organism infests the body is related to the socio-cultural belief system. Srinivasan et al. relate delusional parasitosis to the 'navadwaras' or the nine orifices in body and describes it as a representation of the 'decay' or 'rot' in these organs caused by lack of control over them by the ego.⁴ Indian television too has an interesting journey of snakes from movies to daily soap operas. Earlier it was a part of supernatural or fantasy series, but of late they tend to make Indian minds believe anyone could be a shapeshifting snake and reach anywhere. According to Eigen, different symbolic meaning is to be drawn depending on the body part of the snake emphasised: i.e., whether it is its eyes, tongue, fangs, anatomical form or even movement.⁵

She was diagnosed with delusional infestation, which is a type of delusional disorder with somatic delusions. Munro proposed it in 1982 as a type of mono-symptomatic hypochondriacal psychosis.⁶ Earlier literature described this disorder as acarophobia, termed by American dermatologists, which described a state

where there is fear of parasites which belong to zoological order Acarina or family Acaridae. It was Wilson and Miller who considered the article of Ekbohm in German and suggested the term delusional parasitosis.⁷ Recent reports have found that patients reporting the presence of any parasitic infestation are rare, and hence the broad term of delusional infestation is recommended.⁸

There are few case reports of patients being infested with snakes. Most of the delusions of snake infestation reported are as a part of another psychiatric disorder, unlike the present case where the delusion was the only presenting symptoms.¹ A classical patient with delusional infestation is a middle-aged to an elderly woman with no past psychiatric history with intact social and cognitive function, which is similar to this patient profile. There could be few atypical manifestations like being infested by larger pathogens as in the present case. The exact prevalence of the delusion of the body being infested by larger pathogens is not conclusive. It is reported that pathogens which are imagined may show developments during the course of illness. The source of the infestation in the present case is through another human being which is much the same as many other reported cases. Most of the cases with primary delusional infestation are 'on' or 'in' the skin infestation rather than inside the body.⁸

A cross-sectional study on the socio-demographic and clinical characteristics of patients attending the tertiary care hospital in India has concluded that of the 39 patients studied majority were females, married and uneducated. Face /head/scalp/nose were the most common sites of infestation with

about three fourth of them unable to see the infesting organism.⁹

Treatment of delusional parasitic infestation usually depends on the liaison between psychiatrist and the dermatologist. The treatment of primary delusional infestation is with antipsychotics. There are levels of evidence for the typical antipsychotics. There are numerous case reports that cite the efficacy of risperidone and amisulpiride. But not much data is available regarding the efficacy of aripiprazole in the treatment. Selective serotonin reuptake inhibitors combined with antipsychotics have proved to be efficacious, but there is a paucity of supporting data. Indian literature does mention about electroconvulsive therapy being useful as a last resort in resistant cases.¹⁰

CONCLUSION:

The pathogen, which is involved, type and the site of infestation in the present case make this case distinct from other reports. Due to its low incidence, there are not many systematic reviews about the disorder. Even though antipsychotics are the mainstay of treatment, considering the socio-cultural background and diagnosing the disorder remains a challenge. Research may throw light on neurobiology and neurotransmitter system in delusional infestation to improve the outcome but still understanding the phenomenology in the patient is worthwhile.

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