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Case Report

Self inflicted injury in a case of delusional parasitosis

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ABSTRACT

Delusional parasitosis also known as Ekbom's syndrome, is a fixed, firm, false belief about a parasitic infestation of skin despite absence of evidence. Non-suicidal self injury (NSSI) is the deliberate and direct change leading to destruction of healthy body tissues e.g. skin cutting, scratching, burning, hitting of oneself and even enucleation of eye and amputation of body parts. We present a case of a 35-year-old male patient with delusional parasitosis for the past 3 months, referred from dermatology, who resorted to cutting himself on his arm and abdomen. He was treated successfully with anti-psychotics and had no further intention of self-harm.

Keywords: Delusional parasitosis, Infestation, NSSI

INTRODUCTION

Delusional parasitosis, also known as delusional infestation or Ekbom syndrome, characterized by a false belief about a parasitic infestation of the skin, despite no evidence of the same. Delusional parasitosis can be categorized into primary, secondary, and organic. In most cases the patients are seen in psychiatry due to a referral from dermatology.[1] Careful dermatological examination however must be done to rule out a skin disorder, some patients may have a skin disease initially and later start having a false belief about a parasitic infestation. Hence other differential diagnoses to consider are scabies, insect bites, Grover's disease, chronic folliculitis, and dermatitis herpetiformis.[2]

It can occur in a wide variety of physical and psychiatric conditions e.g.-Diabetes mellitus, hypothyroidism, nutritional deficiency (vitamin b12, niacin), infections (TB, syphilis), lymphoma, cardiac failure, neurological conditions (Dementia, Huntington's disease), Schizophrenia, depression, bipolar I, recreational drug use, corticosteroid use. Pts usually complain of crawling, biting and burrowing of the 'parasites'. Some may resort to self-mutilation, biting of nails obsessively, usage blades to cut themselves.[3] NSSI is the deliberate and direct change leading to destruction of healthy body tissue without having a suicidal intent, they include skin cutting, scratching, burning, hitting one self, even enucleation of eye and cutting off of body parts.

There are 3 types of self-mutilation: 1) Major-isolated acts with severe body tissue destruction, 2. Stereotypic self-mutilation- which includes repetitive acts commonly occurs in mentally challenged individuals; 3. superficial or moderate self-mutilation- acts low in lethality-like skin cutting, carving.[4,5]

There is an association of NSSI and PLE (Psychotic like experience, not reaching clinical threshold required to treat). NSSI and suicidal behaviour are different in their causation, impairment, mental state, method, course and outcome, But NSSI can be associated with significant injury including nerves, infections, even death.[6,7]

CASE REPORT

A 35 years old male patient Mr. S, businessman, unmarried with education up to class 12, tobacco user and no family history of psychiatric illness was referred from the dept. of dermatology with unresolved complaints of insect like things crawling across his body. Patient had this complaint, which had gradually increased for the past 3 months. He also had multiple cut marks on the right arm and abdomen. He complained that the insect like things came out of the skin but before he can see them, they burrowed into the skin especially upper limbs and abdomen. At first, he scratched vigorously wherever he felt the sensation of insects crawling but was unable to search the source. This inability to see the insects made him cut his skin at those places with either a knife or a blade, but despite that, he was unable to see them. He didn't have suicidal ideation or previous history of self-injury. Symptoms started gradually after he spent a night at a lodge which had a bed beg infestation. Initially, he used to take a shower everyday with anti-bacterial soap and put Neem and turmeric paste, along with taking some herbal tonics, but to no avail. Later he even showered with diluted phenyl solution. He became quite anxious about this predicament and was unable to go to work or do his daily religious rituals, couldn't wear half-sleeved T-shirts or go outside because of the excessive itching. Since there was no respite, he presented to a general physician who referred him to the dept. of dermatology because of the scarring due to scratching. Pt Lives with his mother and sister and is the sole bread winner. About 2 years ago he made a risky financial move which had landed him in debt, but he was able to settle it within a year with help from his friends. He complains of being overwhelmed with responsibilities at times, especially after the setback as the money was saved for his sister's wedding. His smoking had increased to 2-3 packs per day in the two-year period since intake started 15 years ago Although presently, he smokes about 1 pack per day.

On MSE, he was appropriately dressed in full sleeved shirt and trousers, had long nails, multiple scarring and cut marks over the dorsal aspect of right arm and forearm, and abdomen; affect was anxious; Thought content had Delusion of parasitosis, tactile hallucination with intact abstraction, judgement and insight was grade 3. HAM-D score was 10 and HAM-A score was 27. BABS-19.

He was treated with risperidone 2 mg and clonazepam 0.5 mg and advised to follow up within 4 weeks. He reported partial improvement and dose was increased to risperidone 4 mg, after which patient had significant improvement within 4 weeks, BABS score reduced to 4; HAM-D and HAM-A score reduced to 7 and 5. Within 3 months the marks slowly began to fade and there wasn't any more skin cutting or any suicidal ideation. He was able to go to work and do other activities of life and have a social life. Patient was advised to the follow up regularly.

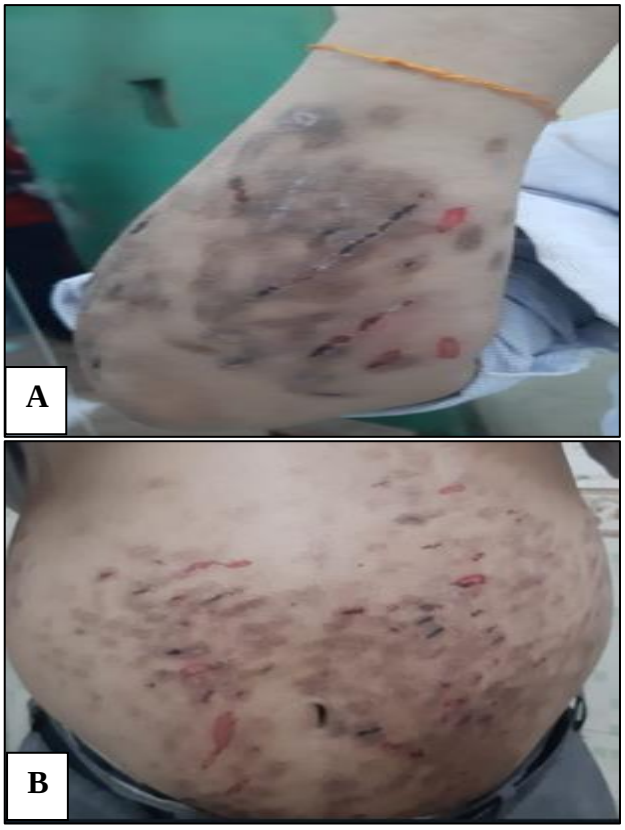

Figure 1 (A and B): Before treatment.

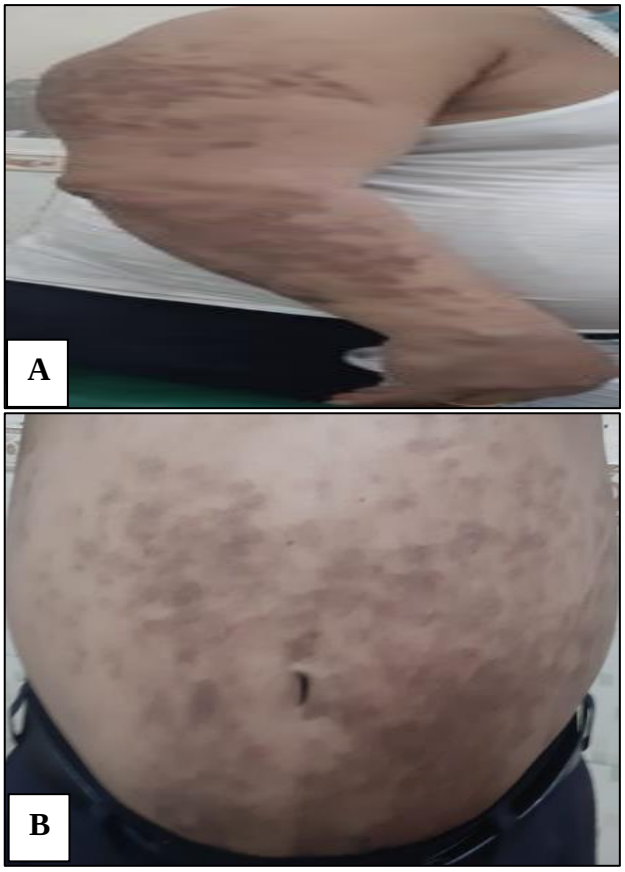

Figure 2 (A and B): After treatment.

DISCUSSION

Ekbom's syndrome or delusional parasitosis is used to signify when a patient has a fixed, firm, false belief about being infested with insects, fleas, worms, mites, lice, or other organisms. It may present as a shared psychotic disorder, occurring more commonly in women over 50 years and in people with low socio-economic background. The sensation of itching is followed by scratching resulting in the clinical picture of excoriations in areas of the body with easy access. Patients usually have had many consultations with different physicians because of the unsatisfactory conclusion they receive of having no real infestation, thus they may bring with them some samples of hair, skin scabs, dust particles, lint, which often come in a match box, called 'match-box sign'. It has an association with different mental disorders, including schizophrenia, depression, anxiety, or obsessive-compulsive disorder.[8]

It can be difficult to treat as patients may be hesitant to accept referral to psychiatry and a multi-disciplinary approach is a better way to go about it. Treatment is usually with anti-psychotics and establishing a therapeutic alliance is key towards successful outcomes. The as presented here is unique in a way that there are only few cases seen of delusional parasitosis, which have presented with such self-injury, and that even without a history of suicidal attempts or long-standing psychosis, patients may resort to hurting themselves. An association between stressful events and NSSI has been previously established in a study, which along with mental disorders contributes significantly to the likelihood of self-harm.[6] Higher proportion of NSSI are associated with psychotic experience compared to those without.[7] The type and severity of psychotic experience and the injurious behaviour elicited i.e. suicidal or non-suicidal remains to be clarified.[9]

There is a significant overlap of the risk factors for NSSI and suicidal behaviour, 2 being at either ends of the spectrum proposed as gateway theory, but both require clinical assessments and interventions.[10]

Psychotic experiences have been shown to be higher in those individuals who have a history of childhood trauma (physical and sexual abuse), bullying and exposure to domestic violence. The reason for the various self-harm attempts, suicidality in persons experiencing psychotic symptoms may be comorbid psychiatric illnesses, reduced tolerance for stress/increased stress sensitivity, poor coping skills.[11]

Even if the intent isn't suicidal at the beginning, in some instances patients of Delusional Parasitosis can hurt themselves severely in an attempt to 'remove the parasites', family education about warning signs of suicidal behaviour should be given especially if clinically ascertained to be of high risk for self-injury.[12]

CONCLUSION

Our patient had presented with delusional parasitosis along with self-cutting, after first having tried home remedies, general and dermatological review. Patient had no intention to die but cutting was his way of removing the infestation for which he couldn't find evidentiary support of.

In our case there was self-injurious behavior along with delusions, thus the association of psychosis and self harm or suicidality needs to be further explored. Even in a patient with no previous history of suicidal attempt, when present with NSSI as the first act of self-harm should be evaluated for present and future suicidal ideation.

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REFERENCES

1. Reich A, Kwiatkowska D, Pacan P. Delusions of Parasitosis: An Update. Dermatol Ther (Heidelb). 2019;9(4):631-8.
2. Lee CS. Delusions of parasitosis. Dermatologic therapy. 2008;21(1):2-7.
3. Aw DC, Thong JY, Chan HL. Delusional parasitosis: case series of 8 patients and review of the literature. Ann Academy Med Singap. 2004;33(1):89-94.
4. Walsh BW, Rosen PM. Self-mutilation: theory, research, and treatment. New York, NY: Guilford Press. 2008;32.
5. Favazza AR. Nonsuicidal self-injury: How categorization guides treatment. Curr Psychiatr. 2012;11(3):21-5.
6. Koyanagi A, Stickley A, Haro JM. Psychotic-like experiences and non-suicidal self-injury in England: results from a national survey. PloS one. 2015;10(12):e0145533.
7. Lebelo LT, Grobler GP. Case study: A patient with severe delusions who self-mutilates. S Afr J Psychiatr. 2020;26:1403.
8. Merad Y, Belkacemi M, Medjber M. Delusional Parasitosis in a School Teacher Living in a Rural Area: Parasitological Approach. Cureus. 2022;14(2):e22147.
9. Steenkamp LR, De Neve-Enthoven NGM, João AM, Bouter DC, Hillegers MHJ, et al Psychotic experiences, suicidality and non-suicidal self-injury in adolescents: Independent findings from two cohorts. Schizophrenia Res. 2023;257:50-7.
10. Hielscher E, DeVylder JE, Saha S, Connell M, Scott JG. Why are psychotic experiences associated with self-injurious thoughts and behaviours? A systematic review and critical appraisal of potential confounding and mediating factors. Psychological Med. 2018;48(9):1410-26.
11. Kelleher I, Cederlöf M, Lichtenstein P. Psychotic experiences as a predictor of the natural course of

suicidal ideation: a Swedish cohort study. World Psychiatr. 2014;13(2):184-8.
12. Armin S, LaPointe G, Jacob R. Importance of early recognition and management of delusional parasitosis. Proc (Bayl Univ Med Cent). 2021;35(2):256-58.

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