Delusional infestation with fungus

Sir,

The delusion of infestation of the skin with parasites (DP) has been recognized for over a century;[1] however, the terminology and nosological classification has changed over time. As the central theme of this delusion involves somatic or hypochodriacal concerns, this phenomenon was earlier referred to as a monosymptomatic hypochondriacal delusion[2] and is currently classified as a persistent delusional disorder (PDD) in the international classification of disease (ICD-10)[3] and delusional disorder of the somatic delusion type in diagnostic and statistical manual of mental disorders (DSM-IV TR).[4]

This is a relatively uncommon condition and scientific literature about the same is mostly confined to case reports and short case series.[5] The sufferer typically and commonly identifies the offending parasites as insects, bugs, or worms and may produce various evidences to support this delusion.[5]

We present a case of where the presentation was characterized by a delusion of infestation with a fungus. In addition to discussing the novelty of such a presentation, we will also discuss relevant accompanying factors relevant to the presentation and management.

A 21-year-old female, engineering student, presented with the complaint of recurrent fungal infection for the last 2 years. She had an episode of facial eruption, which did not respond to treatment with topical antibiotics and steroid-antibiotic combinations. She visited our center and after Wood's light examination and subsequently KOH preparation, she was diagnosed as *tinea faciale* and was prescribed oral terbinafine 250 mg a day for 2 weeks, which cured her condition. Thereafter, whenever she had any lesions or itching anywhere in the body, she would take tablet terbinafine, which improved her symptoms. Because of these repeated episodes, she started to believe that she had persistent fungal infection and she would infect her family as well. She approached various dermatology clinics and private practitioners with these complaints and was told each time that she did not have any fungal infection, but she was not convinced. The patient would often surf the internet websites, which only served to reinforce her belief.

She presented to us with complaints of recurrent fungal infestation of her facial area with the hope that she would finally be cured of this infection completely. On physical examination, skin findings were unremarkable, except for a few acne lesions. She insisted on a Wood's light examination and microscopy of lesions, which turned out to be negative. Despite this, she insisted on treatment with some strong antifungal medication. She was prescribed cetrizine for itching and was assured that she did not have any infection. She reported to us after 5 days, with complaints worsening of itching and fungal infection. The patient was again explained that there was no objective evidence for her belief. However, she was not amenable to reasoning and continued to insist treatment with a strong antifungal, preferably injectables. Though she vehemently resisted the suggestion of referral to a psychiatrist, on much persuasion, she agreed. During an evaluation, it was revealed by the parents that she would spend hours every day minutely examining each lesion in the mirror, neglected her studies, household chores, and leisure activities. A provisional diagnosis of persistent delusional disorder was made, which was confirmed on subsequent follow-ups. When the patient was confronted with the fact that she may have a psychiatric problem, she was irritable and refused to consider the possibility. However, she was persuaded to keep visiting the psychiatry department on her visits to the dermatology department. On subsequent visits, gradually, the illogical nature of the fungal infection was discussed at length as also her excessive preoccupation with this condition by the psychologists. The same was reinforced in the dermatology department. Eventually, the patient agreed to try a psychotropic medication if she was promised that it would not cause her any side effects. Various options were discussed, and she was started on olanzapine 5 mg a day, which was gradually titrated up to 10 mg per day. After 6 months, the patient

continues to be on follow-up, and she and her family members report reduction in preoccupation with the possibility of infestation with fungus.

Although DP is a rare diagnostic entity, it may be more common in Indian settings than suspected.[6] However, identification of a fungus as the perceived agent of infestation is a rare presentation.[7-9]

It is interesting to note the relationship between the socio-educational background of the index patient and the perceived pathogen in light of the rarity of presentation. She had a background of high educational achievement and access to facilities such as the internet. This would explain the attribution of the perceived pathogen to a fungus. With an increasing access to the internet, the prevalence of such cases is likely to increase. Already, the prevalence of patients with complaints of the internet-related Morgellons syndrome is on the rise.[9] Though the index patient does not qualify for Morgellons syndrome as is currently understood, such patients are likely to be increasingly seen in dermatology and psychiatry clinics.

The case presented above also demonstrates the difficulty of engaging with a patient suffering from DP. Thereafter, the approach with the patient needs to be non-confrontational, and referral to a psychiatrist should occur only after development of rapport and trust with the dermatologist, disclosure of diagnosis should not be premature, and a vindication of the experience of the patient is essential. Psychotropic medications should be introduced with tact and their anti-histaminic properties should be explained if needed. The best treatment options are centered on psychotropic medications and psychotherapy; pimozide was considered drug of choice, but, due to serious adverse effects, experts now recommend atypical anti-psychotics like resperidone and olanzapine.[10] It is also essential that the psychiatrist and dermatologist work together as a team as there are likely to be setbacks in engaging and assuaging the concerns of the patient along the way.

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