Caso Clínico / Clinical Case

Parasites under my skin: a case of delusional infestation (delusional parasitosis or Ekbom Syndrome)

Parasitosis debajo de mi piel: un caso de delirio de infestacion (delirio de parasitosis o Sindrome de Ekbom)

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Abstract

We present a case of a 52 year-old man who presented with chronic non-healing wounds in the skin and who was diagnosed with delusional parasitosis. Patient refused treatment with antipsychotics.

Key words: Skin | Wounds and Injuries | Delirium | Parasitosis. (Source: DeCS: BIREME)

Case description

A 52 year-old white man presented to the hospital with a history of skin ulcerations for approximately 12 months. Most of the wounds were located in the right side of his neck. He felt sensations of crawling, scratching and biting by bugs under the skin. He stated that the rash was caused by parasites which were only seen by him. He tried to remove scabs by himself using his nails to extract the mites underneath. He spent considerable time picking and digging at the skin, attempting to extract the bugs. He visited various physicians for medical attention but none could treat the parasites that he was convinced to have. Symptoms did not improve with anti-histaminics or steroid creams and he continued scratching. Finally, a large, 3x2x0.5 polymorphic, non-tender skin wound developed in his neck that follows the distribution of scratching using only his right hand. He was referred to an infectious disease physician for evaluation. He denied using any illicit drugs. On examination, his wound was located in the posterior neck area (right-sided) but the midback was spared (Fig. 1). The wound appeared not to be infected so antibiotics were not indicated. On physical examination, no parasites were found in the wound or under the skin. A skin biopsy was not indicated. Laboratory analysis including complete blood count, comprehensive metabolic panel, viral hepatitis...
serology, HIV testing, thyroid function tests, B12 vitamin levels and folic acid levels were all within normal limits or unremarkable. Further interrogation revealed that the patient had bipolar disorder as underlying mental illness. He was diagnosed with delusional parasitosis. Antipsychotics were offered but the patient refused them, and he was lost to follow up.

**Discussion**

Delusional infestation is a psychiatric condition characterized by the rigid and false belief of being infested by living parasites or non-living (inanimates) materials. The broader term “infestation” is preferred to delusional parasitosis (or delusion of parasitosis) since patients have reported the presence of a wide range of materials infecting their skin. Although the French dermatologist Georges Thibierge is credited with the first medical description of this dermatopsychiatric condition in 1894, the eponym “Ekbom syndrome” seems more widely used in the medical and psychiatric literature. The psychiatrist Karl Axel Ekbom described a similar psychiatric condition in pre-senile women in 1938. This syndrome is characterized by delusion or false belief that small living “pathogens” are crawling, biting, or living under the skin. This condition can present as primary or secondary psychosis. In primary delusional infestation, patient presents with primary psychosis, which meets criteria for a delusional disorder somatic type. In the latter, the condition is secondary to an underlying psychiatric disorder (like in our patient), other medical illness or drug-induced. Patients with delusional infestations have a false belief (fixed) that they are infested with living or non-living pathogens. Most patients with delusional infestation have multiple coexisting or underlying psychiatric disorders, thus an evaluation by a psychiatrist is recommended. The condition may be life-threatening if the wounds get over infected. In our case, the patient auto inflicted 2 large wounds in the neck in an attempt to remove the “parasites”. This was an intentional mechanical desquamation that yields to excoriations and large ulcerations, erosion, hair loss, lichen simplex chronicus, prurigo nodularis, dermatitis, and serious secondary infections. Recommendations for treatment are to avoid confrontation with the patient engaging them using a non-judgmental approach, and early involvement of a psychiatrist to offer antipsychotics to reduce symptoms such as pruritus and anxiety. Series of histological examination of skin biopsies and other specimens have provided no evidence of
skin infestation and have not changed the initial clinical diagnosis, so a skin biopsy may not be necessary in all cases. In addition, it is recommended to rule out other conditions that may be associated with delusions. Last, but not least, the predominant delusional theme for most patients is that of an infestation (not necessarily parasites) thus some authors have recommended to re-define the syndrome as delusional infestation. Recognizing this condition early is important to avoid progression of the disease leading to severe ulcerations in the skin such as in our case.

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**References**


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