

# Delusions of Parasitosis

Delusions of parasitosis (DP), also known as Ekbom syndrome, is a psychiatric disorder characterized by the persistent belief that the skin is infested with parasites, such as lice, fleas, spiders, worms, or other organisms, despite the absence of any physical evidence of such infestations. Patients with DP often bring items they believe are contaminated, such as pieces of skin, fibers, or debris, in containers like plastic bags or matchboxes, to show their perceived infestation. In some instances, close contacts of the patient, such as spouses or family members, may share the delusion, a phenomenon known as folie à deux or shared psychosis. DP typically occurs in individuals with otherwise normal personalities, without any obvious systemic illnesses, although the condition may be comorbid with other psychiatric disorders.

## **Etiology and Epidemiology**

The etiology of DP remains largely unclear, but it is thought to involve both psychological and neurobiological factors. It has been associated with a variety of psychiatric conditions, including schizophrenia, obsessive-compulsive disorder, bipolar disorder, major depression, and anxiety disorders, though many patients exhibit the symptoms of DP in isolation, without additional psychiatric diagnoses. Epidemiologically, DP is more prevalent in Caucasian populations and tends to affect females at a 2:1 ratio compared to males. The condition often presents in middle-aged or older adults, though it can occur at any age.

## **Clinical Presentation**

Patients with delusions of parasitosis typically report a range of tactile sensations, including itching, burning, or a crawling sensation under the skin, leading them to believe they are infested with parasites. Dermatological findings can vary widely, ranging from normal skin to minor excoriations or ulcers caused by scratching or self-inflicted trauma. The use of erosive chemicals or mechanical damage may exacerbate the skin lesions, further reinforcing the delusion. While the condition can manifest in various forms, there are generally no specific dermatological signs that confirm the diagnosis of DP.

## **Differential Diagnosis**

Since there are no laboratory tests to directly diagnose delusions of parasitosis, a thorough differential diagnosis is necessary to rule out other conditions that can cause similar symptoms, including itching or skin lesions. These conditions include dermatitis herpetiformis, hepatitis, HIV, thyroid disease, anemia, renal dysfunction, neurologic dysfunction, and lymphoma. A microscopic examination of skin scrapings or hair samples may help exclude scabies or louse infestations. Additionally, the possibility of substance abuse, particularly the use of amphetamines,

methylphenidate, or cocaine, should be considered, as these substances can induce similar symptoms, such as pruritus and tactile hallucinations.

### **Diagnosis**

The diagnosis of delusions of parasitosis is primarily clinical, based on the patient's persistent belief in parasitic infestation, despite the absence of objective evidence. Clinicians should carefully exclude other dermatological and systemic conditions through a detailed history, physical examination, and necessary laboratory tests. The diagnosis is made when no other plausible cause for the patient's symptoms can be identified, and the patient's beliefs persist despite clear reassurances from healthcare professionals that no infestation exists.

### **Treatment**

The management of delusions of parasitosis is particularly challenging due to the lack of insight that patients often exhibit regarding their psychiatric condition. As most patients with DP do not believe they have a psychological disorder, their compliance with treatment is often problematic. Building a trusting therapeutic relationship between the clinician and patient is essential for successful treatment. The primary treatment for DP involves the use of antipsychotic medications, which target the underlying delusional thought processes.

Historically, pimozide was the drug of choice for treating DP, but newer antipsychotic agents are now preferred due to their improved side effect profiles. Medications such as risperidone and olanzapine have become the treatment of choice, as they offer effective management with fewer side effects than older antipsychotics. These medications work by blocking dopamine receptors, which are believed to be involved in the formation of delusions. Risperidone and olanzapine are also beneficial in reducing the anxiety and agitation that often accompany DP.

However, because many patients with DP are initially resistant to psychiatric treatment, referral to a psychiatrist may be necessary for further management, particularly in cases where primary care providers or dermatologists feel uncomfortable prescribing antipsychotic medications.

Additionally, therapy may involve cognitive behavioral therapy, which can be useful for addressing underlying psychiatric issues, such as anxiety or compulsive behaviors.

### **Conclusion**

Delusions of parasitosis represents a complex and often challenging disorder in which patients experience a persistent, false belief in skin infestations. Diagnosis is clinical, requiring the exclusion of other medical conditions, and treatment involves antipsychotic medications and, when appropriate, psychiatric referral. Early intervention and building a strong patient-clinician relationship are crucial for successful management, as patients are often resistant to treatment due to their lack of insight. By understanding the multifactorial nature of the disorder, clinicians can offer more effective care to patients with DP and improve their quality of life.

### **References**

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