Delusional Parasitosis

Delusions of parasitosis (DP) was formally diagnosed as a delusional disorder, somatic type, according to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) IV. It was previously called "monosymptomatic hypochondriasis," a term indicating a delusion of infestation by parasitic organisms. Patients with DP describe sensations of crawling, burrowing and even biting from parasites. They may offer elaborate, detailed descriptions of their parasites and may perform ritualistic purifications to rid themselves of the offending organism. These obsessive behaviors include picking and the application of disinfectants and pesticides. Skin is often damaged as result of this self-mutilation. Patients classically present their collection of lint, dried blood, hairs and other skin fragments (spuriously believed to be parasites) in a small box or container, the so-called "matchbox sign". The delusion of infestation may be shared by a family member or significant other, a phenomenon called "folie à deux". Explaining the diagnosis of delusions of parasitosis to patients or their families is difficult especially because they are convinced of having a genuine dermatologic condition. This has led some authors to propose the term "pseudoparasitic dysaesthesia".

Delusions of parasitosis is distinct from formication, in which patients experience crawling, biting or stinging sensations but are not convinced that the cause is parasites. Illicit drugs such as amphetamines can cause formication and can result in a delusional state indistinguishable from delusions of parasitosis. Cocaine abuse can be associated with visual hallucinations and the feeling of bugs crawling beneath their skin, a phenomenon referred to as "cocaine bugs". Drug history should be obtained in the initial evaluation. A thorough psychiatric history should also be obtained with careful consideration to ensure that the delusion is not part of a more global psychotic disorder, such as schizophrenia or bipolar disorder.

The severe discomfort may lead patients to manipulate the skin causing erosions and ulcerations. After long periods without relief these patients may come to believe that an infestation must be the source of their problem. Similar erosions and ulcerations occur in some patients who carry the diagnosis of trigeminal trophic syndrome and are initiated by nerve damage. In this condition, the dysaesthesia, erosions, and ulcerations most often occur paranasally, but one of the most common mechanisms of lesion production is through self-manipulation precipitated by the discomfort and pain. In some patients whose pathology is likely induced by neuropathy, gabapentin has been found to be beneficial.

Steps to Diagnose Delusional Parasitosis:

1. Take a careful case history
2. Perform a complete physical examination and laboratory evaluation, including skin scrapings and/or biopsies, blood counts, chemistry profile, thyroid function tests, and vitamin B12 levels.
3. Rule out other medical conditions (e.g., diabetes, atopic dermatitis, and lymphoblastomas) with skin manifestations that can appear to be caused by arthropods.
4. Work with entomologists or parasitologists to rule out true infestations (eg., scabies mites, animal mites, lice, fleas, and bed bugs).

5. Rule out other organic causes (eg., allergies and contact dermatitis).

6. Rule out history of drug abuse (especially in younger or male patients).

Reference: