Treating Patients With Delusions of Parasitosis: A Blueprint for Clinicians

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Dermatologists often inquire how to approach a patient with delusions of parasitosis. Avoiding negative countertransference and developing a therapeutic alliance with the patient are key steps for dermatologists. Even though each case is unique, this article serves as a blueprint for clinicians on how to approach and treat these patients.

Cutis. 2010;86:65-68.

Treating patients with delusions of parasitosis, or delusional disorder somatic type according to the *Diagnostic and Statistical Manual of Mental Disorders* (Fourth Edition) classification, can be difficult for dermatologists. Patients believe that their skin is invaded and/or infested by external materials (ie, parasites, fibers), usually due to abnormal sensations of the skin. They start to self-treat the invaders by using methods such as multiple long baths each day, bleach, or other caustic detergents. They also attempt to dig out the invaders by mechanical means, such as scissors, tweezers, or their nails, which leads to serious skin damage as well as multiple infections and scarring. Dermatologists try in vain to convince patients that there are no invasions/infestations. They also try to refer patients to a psychiatrist, a referral that usually makes patients angry and upset. The Internet, for the most part, has been an aggravating factor, with multiple Web sites feeding into the delusions and promoting use of different remedies to take care of the nonexistent infestations.

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It is common for dermatologists in a busy practice to have a negative countertransference toward these demanding distressed patients that will resist their recommendations and take too much of their time, which will in turn prevent a therapeutic alliance with the patient. Multiple publications and case reports on treatment of this difficult ailment emphasize the importance of a good therapeutic alliance but do not address in any detail how to build this alliance.[1-6] It is evident that dermatologists need a better approach for these time-consuming situations.

Preventing Negative Countertransference

The existence of 2 different sets of beliefs causes conflict between dermatologists and patients with delusions of parasitosis. While the dermatologist believes that the problem is psychological, the patient believes that the problem is a foreign material that the physician is unable to find and treat; some patients are afraid that it will eventually kill them.

The definition of delusion is a false fixed belief.[7] Therefore, the dermatologist must first accept that because of the fixed nature of the delusion, he/she will not be able to reason with the patient or change the patient's belief. In fact, many patients with monosymptomatic delusions, even those treated with high doses of neuroleptic medications, will continue to believe that they are still infested but the parasites are not as bothersome.

A more appropriate approach for dermatologists is to empathize with their patients and not get upset when the patient returns insisting that "you are not a good doctor and nothing that you give me is working." To be able to hear this comment and prevent the knee-jerk reaction of being hurt by the patient's insulting approach is the first step in therapeutic alliance. Having a good therapeutic relationship with the patient and preventing serious self-injurious behavior ultimately is

the best help a dermatologist can offer. Try to see the situation from the patient's point of view and accept that his/her beliefs are different from yours; as long as the patient is not an acute danger to himself/herself or others, he/she has the right to have different beliefs.

Treating the Patient

After overcoming countertransference toward a noncompliant patient, the dermatologist needs to start to be a healer. Delusions of parasitosis can have multiple causes and/or differential diagnoses; missing them could have catastrophic consequences. There are 2 main types of delusional disorders of the somatic type: primary (idiopathic) and secondary. Secondary delusions of parasitosis are listed in the Table.

A systematic approach to treating patients with delusions of parasitosis follows. First, take the patient's concern seriously. Then take a complete history and physical examination; review the patient's medications and drugs of abuse. Some patients have delusions that are induced by a combination of opioids, medications for pain, and stimulants such as a combination of dextroamphetamine and amphetamine for attention-deficit/hyperactivity disorder. Patients with cocaine abuse also have presented with delusional symptoms. Baseline laboratory testing should include complete blood cell count with differential; liver, kidney, and thyroid function tests; and vitamin B_{12} and folate levels. Iron studies and rapid plasma reagin also should be performed. Further testing such as urine drug screening, heavy metal screening, human immunodeficiency virus testing, and testing for Lyme disease is determined based on history or abnormal clinical or baseline laboratory findings. Because temporal lobe epilepsy could cause abnormal somatic hallucinations based on clinical presentation, a sleep-deprived electroencephalogram in some cases is useful. Take scrapings of the skin and examine the material brought by the patient under the microscope; get a second opinion from a dermatopathologist. Most patients appreciate this approach and feel that their concerns are not dismissed. On the other hand, dermatologists should avoid biopsies if there is no primary lesion; patients will generally report that the biopsy was not taken from the right location if the results are negative. Also, screen the patient for depression and anxiety using reliable questionnaires such as the Beck Depression Inventory or Quick Inventory of Depressive Symptomatology (Self-report) for depression and the Beck Anxiety Inventory or Penn State Worry Questionnaire for anxiety. If the patient scores highly for depression or anxiety, it is easier to propose a referral to a psychiatrist. If there is any infection of the skin, ensure that it is treated promptly.

It is important not to feed into the delusion. Tell patients, "We are going to look for and find the culprit if there is any, but in the meantime, treatment of your depression and anxiety and/or sleep problems will help you have fewer bothersome symptoms." Refuse empiric treatment of parasites if they have not been found; treatment will only convince patients that the delusions are true and they will push for more treatments with higher doses. It is important for dermatologists to be familiar with a few antidepressant, antianxiety, and antipsychotic medications, as well as their side effect profiles, to be able to prescribe them if the patient is willing.[1-3,5,6,10] Dermatologists also should work with patients on skin care to avoid wounding and scarring that will only aggravate the abnormal sensations.

After the first session, ask patients to return for follow-up in 2 to 3 weeks to review the laboratory results. At the second visit, if the patient has agreed to take medications to help with depression, anxiety, or sleep problems, or neuroleptic agents for delusions, he/she may already feel better and be more receptive to other recommendations. If the laboratory test results are abnormal, take time to go over the results and recommend the appropriate treatment. If the laboratory results are normal, use them to reassure the patient with phrases such as "In cases of infestation, we usually have hypereosinophilia, and the fact that your eosinophils are normal is a very good sign that there is no serious infestation," or "Normal laboratory results show that there is no dangerous infestation and what you feel may be the result of your heightened sensitivity to normal stimuli on your skin, which happens with hyperexcitability states of the brain due to chemical imbalance or peripheral neuropathies. We have medications that would help you with these situations."

Many patients will show better compliance with treatment recommendations if they feel that their beliefs are respected and their concerns are not dismissed. Some patients will continue their delusions and self-injurious behavior. In these cases, always remember that if a patient continues to follow up, it means that he/she feels that the dermatologist is helping.

Refusing Psychotropic Medications or Referral to a Psychiatrist

If a patient continues to follow up but refuses psychotropic medications or referrals to a psychiatrist,

Secondary Delusions of Parasitosis and Differential Diagnoses

Medical Disorders	Neurologic Conditions	Psychiatric Disorders	Long-term Use of Substances and Side Effects of Medications
Infectious diseases (ie, tuberculosis, syphilis, HIV)	Dementia	Major depressive disorder	Amphetamines
Chronic lymphocytic leukemia	Multiple sclerosis	Bipolar disorder	Methylphenidate hydrochloride
Malignant lymphoma	Parkinson disease	Schizophrenia	Cocaine (cocaine bugs)
CHF	Huntington chorea	Brief psychotic disorder	Alcohol
Arteriosclerosis	Cerebral infarction		Phenelzine sulfate
Diabetes mellitus	Central nervous system tumors		Pargyline hydrochloride
Vitamin B_{12} and other deficiencies	Seizure disorders (ie, temporal lobe epilepsy)		Corticosteroids
Pellagra	Hearing loss		Topiramate (one case report)[8]
Renal failure			Bromide intoxication
Thyroid disorder			Other medications (ie, bleomycin sulfate, ketoconazole, clonidine hydrochloride, captopril, mefloquine)[9]
Hepatic disease			
COPD			
Dermatologic diseases: stasis dermatitis, vitiligo			

Abbreviations: HIV, human immunodeficiency virus; CHF, congestive heart failure; COPD, chronic obstructive pulmonary disease.

the dermatologist needs to continue with symptomatic treatment and avoid any harmful treatment. Watchful waiting is key. Safety of the patient, his/her family, and the physician are important in this situation. Even though a therapeutic alliance is important, dermatologists should not agree with unreasonable demands of patients for further testing or more medications that are not helpful. If at any point patients have serious infections due to self-injurious behavior, such as caustic treatments of skin or cutting and picking at the skin, dermatologists could work with a family member and local mental health centers to begin the process of involuntary commitment. In these instances, if the court finds the patient unable to consent to treatment, the patient would be committed to receive involuntary treatment. Keep in mind that this process is traumatizing for patients and family members, and as long as a patient is not an acute danger to himself/herself and/or others, he/she could continue to refuse medications and the courts will not commit him/her to treatment. Finally, neuroleptic medications do have serious side effects, and in considering them, dermatologists should weigh risks and benefits. Unless a patient is committed to receive involuntary treatment, an informed consent from the patient is needed for treatment, which means that the patient must understand the purpose for the medication as well as the risks and benefits of using it.

In conclusion, working with patients with delusions of parasitosis requires patience and vigilance, and physicians need to remind themselves of this dictum derived from the Hippocratic Oath: First, do no harm.

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