Psychogenic Pruritus and Its Management

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KEYWORDS

• Psychogenic itch • Psychiatric itch • Chronic pruritus • Somatic symptom disorder
• Somatoform disorder

KEY POINTS

- Psychogenic pruritus is defined as itch not related to dermatologic or systemic causes.
- Psychogenic pruritus can be categorized as a pruritic disease with psychiatric sequelae, a pruritic disease aggravated by psychosocial factors, or a psychiatric disease–causing pruritus.
- In the work-up of psychogenic pruritus, medical causes must first be ruled out, then medication and behavioral treatment offered.

INTRODUCTION

Chronic itching is a frustrating condition for patients and providers alike, and it can be an even more delicate subject when intertwined with a possible psychiatric source. Psychogenic pruritus is defined as itch not related to dermatologic or systemic causes. Beyond this definition, there is a lack of consensus on how to classify the condition, in part due to the overlap between the fields of dermatology and psychiatry.

The *Diagnostic and Statistical Manual of Mental Disorders* (Fifth Edition) has remained vague on the topic of pruritus. Excoriation falls under the diagnosis of "obsessive-compulsive and related disorders," but psychogenic pruritus could also fall into "somatic symptom disorders," "medically unexplained symptoms," or "impulse control disorders." The *International Classification of Disease, Tenth Revision*, is equally vague: psychogenic pruritus is not defined but could fall into the diagnosis of "other somatoform disorders," a subcategory under the broader diagnosis of "neurotic disorders, stress-linked disorders and other somatoform disorders."

Treating patients with psychogenic pruritus is a challenge for the dermatologist. Although there are tools and criteria to diagnose medical sources of itch, many patients have nonspecific findings. Building a relationship with patients is key, because many patients are not open to hearing that there could be a psychiatric component to their condition. Dermatologists should take a multifaceted approach to working up these patients that includes history and physical examination, laboratory testing for common medical or systemic problems, biopsies as needed, and a thorough psychiatric screen.

SUMMARY/DISCUSSION

Psychogenic pruritus can be divided into 3 broad categories (**Fig. 1**). Some patients present with a primary dermatologic disease with itch (eczema, urticaria, and so forth) and develop psychiatric sequelae as a result. Most commonly, this manifests as depression or unmasks anxiety or obsessive-compulsive disorder (OCD). The second category includes patients who experience an exacerbation of their skin disease (psoriasis or

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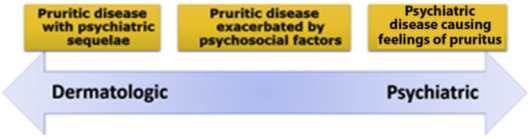

Fig. 1. Spectrum of the source of pruritus.

eczema) in times of stress. Finally, a psychiatric disorder can lead to feelings of pruritus. It can be a challenge to determine whether the skin disease or psychiatric disorder started first. Although the treatment of each of these categories differs, the initial work-up remains the same.

Dermatologists are well versed in how to manage patients who itch due to a known dermatologic problem. In a study of hospitalized psychiatric patients, chronic itch had a prevalence of 32%.[1] In another study, also of hospitalized psychiatric patients, prevalence of itching was 42%, without correlation to a specific psychiatric diagnosis.[2] Patients who are diagnosed as having a psychogenic component to their disorder differ from other patients based on the amount of disability the pruritus causes (**Box 1**). Many skin disorders can negatively affect quality of life, to a degree that may meet or exceed that of patients with diabetes or cystic fibrosis.[3,4] To meet criteria for a psychiatric disorder, however, the disability a patient has must affect social relationships, work, or other daily activities.

Identifying Primary Psychiatric Disease

The management of a dermatology patient with suspected psychiatric disease can be a challenge. The important first step is to assess patients for psychiatric safety. Whether due to the stressors of their skin disease or the prednisone they just received, if patients vocalize concerns about violence (to others) or suicidal thoughts, they require immediate attention. The most helpful questions to ask these patients are the most direct: Do you have thoughts of harming yourself? Of harming others? If patients answer in the affirmative, it is crucial to reach out to local law enforcement or psychiatric services. Asking patients about self-harm does not increase their likelihood of following through on their thoughts.

Screening patients for potential drug and alcohol abuse is also worthwhile because many substances can contribute to the sensation of pruritus. Pruritus is a well-known complication of alcoholic liver disease, particularly in the presence of cholestasis.[5] Cocaine and amphetamine abusers are prone to delusions of parasitosis, sometimes referred to as *meth mites*, often leaving excoriations and prurigo nodules as evidence.[6,7] The use of opioids, either illicit[8] or prescribed,[9] is common in patients with delusions of parasitosis, which may be partially due to histamine release by opioids leading to pruritus.[10] As such, substance abuse can easily confound the work-up of pruritus, and awareness of it early is important. Checking a patient's medication list (current and previous) can be helpful, asking about illicit drug use may yield a benefit, and including a urine drug screen in the work-up of any new patient with pruritus can be enlightening.

Getting patients help from a psychiatrist or psychologist is ideal for these patients. The authors find that it is important to first normalize the idea of psychiatric care, using a statement such as, "I find that many of my patients with severe psoriasis/eczema have a difficult time dealing with their skin disease. Since we know that stress can make the skin disease worse, it is even more important that I don't miss out on any of my patient's symptoms. Have you ever thought you were depressed/anxious?" Many standardized psychiatric screening tools are available for free online and can be completed by patients during check-in. The authors' office uses the Patient Health Questionnaire-15 for patients with depression, because it focuses on physical symptoms of a patient's condition. The Modified Mini screen can look for signs of anxiety, depression, OCD, posttraumatic stress disorder, and psychosis. The advantage of using a standardized tool is that it serves to offer objective evidence of why the provider is concerned, much like a biopsy is sometimes needed to reassure a patient that their physician's clinical diagnosis is correct.

Box 1
Signs that a patient may have psychogenic itch

History
- Disability out of proportion to symptoms
- Psychiatric comorbidities
- Anxiety, depression correlate with itch intensity
- Dysfunctional coping behaviors (helplessness)
- High number of doctor visits

Clinical signs
- Lack of cutaneous findings
- Pruritus of face more likely
- Intranasal formication more likely in delusions of parasitosis
- Hostility/blame toward provider
- Does not follow social cues

Managing Primary Dermatologic Disease

If it is believed that the skin disease is triggering the psychiatric issue, a dermatologist spends the majority of the time with the patient focusing on the improvement of the skin disease. Intralesional injections can provide significant relief in office, as can wet wraps or other occlusive treatments. Localized treatments for itch, including menthol and cool compresses, can give patients a sense of control over their disorder when prescription medications are unable to help. Dermatologists must remember that the psychiatric consequences of the skin disease may not be proportionate to the extent of disease in these cases. There are reasons to consider systemic medication even for (relatively) minor disease if it is leading to significant disability.

Dermatologists are also well versed in treating the second category of psychogenic pruritus patients—those with known skin diseases, who note their pruritus worsens with psychiatric stress. Stress is well known to cause diseases like psoriasis to flare,[11] so it is not surprising that anxiety, depression, or mania can flare skin disease as well. Those with eczema, chronic urticaria, prurigo nodularis, lichen simplex chronicus, and pruritus of advanced age can be exacerbated with aggravation of latent psychiatric problems.

Patients with known skin diseases who note their pruritus worsens with stress. Dermatologists should work to improve their skin symptoms when possible and help to make patients aware of a potential link between their skin and mental health. Once patients have gained insight into this trigger of their disease, they may be willing to seek treatment. Of all of the patients with psychodermatologic disease, the authors find this group the most rewarding because the improvement of their skin as the mental health improves can be seen. Patients with eczema and pruritus of advancing age often respond to stress reduction treatment, behavioral therapy techniques to limit scratching, or prescription antidepressant treatment.

Managing Primary Psychiatric Disease

The third category of psychogenic pruritus patients, those with a primary psychiatric disorder leading to pruritus, is often the most challenging for a dermatologist to manage. These patients rarely have insight into the psychiatric source of their condition. Patients with depression, anxiety, and psychosis all present differently when dealing with psychogenic pruritus. Often a patient's presenting history aids in differentiating between these causes.

Patients with depression may present with itch much like a patient with fibromyalgia presents with joint pain. These patients may have a more generalized somatic symptom disorder, which involves symptoms that are either very distressing or result in significant disruption of functioning. These patients often complain of fatigue, brain fog, or joint aches in addition to their itching. This condition can be exacerbated by recent trauma and manifest much like posttraumatic stress disorder. The authors have seen several patients present with psychogenic itch after sexual encounters and/or after being a victim of a crime.

Skin picking and trichotillomania are forms of OCD. They are characterized by intrusive thoughts or urges that are experienced as unwanted (obsession), often necessitating repetitive behaviors or rituals to help alleviate the otherwise intolerable anxiety (compulsion).[12] Trichotillomania is characterized by recurrent pulling hair, leading to hair loss in response to tension.[9] Patients experience gratification only after the act is performed.[13] These patients may present with the concern that they "need to get the core out" of an ingrown hair or remove another small skin abnormality.

Patients with bipolar disorder go into manic states which can make them hypervigilant to cutaneous stimuli. They may perceive mild itch as severe and take extraordinary measures to stop the itching. Mania is often accompanied by shopping sprees, increased sexual promiscuity, or prolonged periods of sleeplessness. The authors use 1 patient as an example: a 34-year-old woman presented to the authors' clinic for "itch." She had been preparing for a first date with a man she met online that morning. She spent $500 on cosmetic products at a department store to help her itching and cover up her scratch marks. She was rejected by the man that evening when she made sexual advances. She presented to the office the following day with itching, but by the end of the visit had tried to ask a staff member out as well. On further questioning, she admitted a previous diagnosis of bipolar disorder and having stopped her medications a few months earlier.

Psychoses associated with pruritus include delusions of parasitosis and schizophrenia with tactile hallucinations. Delusions of parasitosis is a monosymptomatic hypochondriacal psychosis characterized by the false belief of being infested with living organisms or innate material.[14] The patients often present with concerns that their infection is causing their itching whereas schizophrenia with tactile hallucinations is polysymptomatic, causing feelings of being touched, burning or tingling, or itch.[15] Patients with delusions rarely present with a chief complaint of itch but instead present with a concern of an infestation. Often they have already made a decision as to the exact organism affecting

them. They point out the itch is the "proof": that they are infested and relate changes in itch as various treatments cause the infestation to improve or worsen. Patients with schizophrenia should demonstrate 2 of the following 5 symptoms: (1) *delusions, (2) *hallucinations, (3) *disorganized speech, (4) disorganized or catatonic behavior, and (5) negative symptoms, with 1 of these 5 being 1 of the starred (*) symptoms. Negative symptoms include blunted emotional responses, social withdrawal, or anhedonia. These patients have impaired cognition and a difficult time making logical connections, such as "I used a strong medication to treat the parasite, therefore if the symptoms persist perhaps this is not a parasite." Although patients with delusional disorder can be successfully be treated by a dermatologist,[14] the treatment of schizophrenia should not be attempted in a dermatology office. There is likely a spectrum of presentation for delusions of parasitosis. Although patients with less severe symptoms may be adherent to medication management, those who are in a terminal delusional state are not likely to continue their medications in the long term.

The Workup

For any patient with psychogenic pruritus, it is critical to set expectations at the initial appointment about how the evaluation will proceed and ideally to allocate multiple appointments to the work-up. These patients should receive 1—and only 1—thorough work-up before a provider concludes they have psychogenic pruritus. The work-up of potential psychogenic pruritus is the same as if there were no psychiatric source. It is useful for the first appointment to be used to get to know the patient and review pertinent history. Along with the history, a thorough examination should guide the need for laboratory testing. If time permits and a primary lesion exists, a skin biopsy may be considered, although time often requires this to happen at the second visit. It is advisable to hold off on making a diagnosis unless certain. It may be appropriate to try an empiric treatment (topical or oral) to see how a patient responds. Scheduling a longer follow-up visit within a few weeks of the initial visit allows time for data collection, corroboration from other providers, and time to try any empiric home treatments that may be appropriate.

At a follow-up visit, the physician should review outside records, the laboratory tests, and the results of any review of systems or psychiatric screening test. This may take more than 1 additional visit to complete. The goal is to have a productive conversation about the condition and treatment options. This allows ample time to reassure the patient about the absence of infection or any other skin disease. If appropriate, this is an opportune time to state that the evaluation is complete. At this stage, candor is helpful. If there were no pertinent positives on the work-up, this is the time to discuss the possibility of an idiopathic etiology to the itching. Offering a patient multiple choices on how to proceed can help build rapport and also help assess the patient's level of insight. Some patients choose a hands-off approach once they have been reassured the itch is not caused by cancer or infection. These patients often chose to ignore the itch, live with it, and come back in a period of time to check in. Others continue to seek an "internal" cause for the itch and (unfortunately) seek care elsewhere. The goal is to have patients understand that there is no clear "medical" cause for their pruritus, and they should focus on treating their symptoms. Once dermatologists have built rapport with patients, patients may agree to try trial-and-error treatments, such as oral medications and behavioral treatment, to find a solution.

Treatment Options

Medical and behavioral treatments both play a role in treating psychogenic pruritus. The treatment of localized pruritus or neuropathic pruritus often uses topical therapies, injections, or anticonvulsants.[16,17] For patients with an obsessive-compulsive component to their itch, cognitive behavior therapy (CBT) has been shown most effective.[18] Patients work on techniques to decrease the urge to pick, often by removing triggers and finding alternative coping mechanisms. It is important that providers tell these patients to look specifically for therapists or psychiatrists who perform CBT, because they may differ from other more classically trained therapists.

For any patients with chronic itch, relaxation therapy and CBT can be helpful.[19] It can be even more efficacious to use these treatments in patients with concomitant depression or anxiety.[18] For these patients, it is important that they find a provider they are willing to see and develop a relationship with. For psychosis or significant forms of bipolar disorder, medication management is often needed.

Most dermatologists are already familiar with the first-line medications for patients with psychogenic itch. First-generation antihistamines, such as hydroxyzine and diphenhydramine, are mostly used as sedatives in the evenings. They are generally too sedating for daytime use and their efficacy in treating pruritus specifically is limited. Although second-generation antihistamines are less sedating, unless patients have a histamine-based

cause of itch (urticaria,) they are unlikely to respond to this medication. Doxepin is a tricyclic antidepressant (TCA) with strong antihistamine and sedative effects. The benefits of this drug over antihistamines is the longer effect of the drug and its metabolites, so once-daily dosing in the evening may work all day. Doxepin can be started at 10 mg nightly and slowly titrated up to 100 mg.

The medication used to treat psychogenic itch depends on the underlying psychiatric disorder. If the presumed underlying problem is related to depression, anxiety, OCD, or somatoform disorder, selective serotonin reuptake inhibitors (SSRIs) or TCAs are helpful (**Table 1**). Doxepin certainly can help, as can sertraline and citalopram.[20] Sertraline can be started at 25 mg per day and titrated up to 100 mg slowly to reduce the chance of side effects. Although the mechanisms of gabapentin and pregabalin are not fully understood, case reports have shown it effective in treating prurigo nodularis and other neuropathic itch.[21,22] Gabapentin should be started at 100 mg 3 times per day and can be titrated up to 600 mg 3 times per day. Sedation is usually the limiting factor and can be alleviated by a slowly increased dose. Similarly, pregabalin can be started as low as 75 mg per day, increased by 75 mg per day to 150 mg per day at 1-week intervals to a maximum of 300 mg per day divided in 2 or 3 doses.

If a provider concludes a patient has delusions of parasitosis, antipsychotics are the best choice. It is important first to develop a rapport of trust with a patient before the idea of starting this medication.[23] It can be helpful to focus on the patient's symptoms of itch and point out that these medications are used for many conditions, including Tourette syndrome (in the case of pimozide) or depression (for aripiprazole). How antipsychotics like olanzapine bind the histamine receptor,[24] which may explain its effectiveness for treating patients with various forms of itch, may be discussed.[25] Aripiprazole has the advantage of approval for both psychosis and depression augmentation and has a lower side-effect profile than the other antipsychotics. For this reason, it is often tried first, even though the literature supporting pimozide is more extensive. The authors have found that adding 5 mg per day of aripiprazole to augment an antidepressant is helpful in patients with somatic symptoms of their delusion. For those patients further along in the "spectrum of delusion," doses between 10 mg per day and 25 mg per day can be helpful.[26] In multiple studies, pimozide has been found to show improvement in symptoms of delusions of parasitosis in 3 weeks to 8 weeks at dosages ranging from 1 mg per day to 6 mg per day.[27]

When to Refer

There are some cases of psychogenic pruritus that dermatologists are simply not equipped to manage. Patients with bipolar disorder or frank

Table 1
Medical treatment options

	Adverse Effects
Antidepressants: depression, anxiety, OCD, somatoform disorder	
TCA: doxepin 6–10 mg po qhs, can increase up to 100 mg qhs	Anticholinergic, antihistiminic, decreased seizure threshold, sexual dysfunction
SSRI: sertraline 25 mg po qd, up to 100 mg qd	Gastrointestinal upset, sexual dysfunction
SSRI: (especially OCD) paroxetine 10 mg po qam, up to 40 mg qam, taper off slowly	Gastrointestinal upset, sexual dysfunction
NaSSA: mirtazapine—7.5 mg po qhs, increase to 15 mg if needed	Dry mouth, sedation, weight gain, avoid in closed-angle glaucoma
Antipsychotics: delusions of parasitosis, psychosis, depression	
Pimozide: 1 mg po qd, increase to 6 mg qd	Extrapyramidal symptoms, QTc prolongation, tardive dyskinesia
Olanzapine: 5 mg po qd, increase to 10 mg qd	Sedation, weight gain
Aripiprazole: 5 mg po qd, increase up to 25 mg qd	Akathisia, restlessness, insomnia
Anticonvulsants: depression, anxiety, OCD, somatoform disorder	
Gabapentin: 100 mg po tid, can increase slowly up to 600 mg po tid, taper off slowly	Sedation
Pregabalin: start 50 mg bid, increase slowly up to 150 bid, taper off slowly	Dizziness, somnolence, ataxia

Abbreviation: NaSSA, noradrenergic and specific serotonergic antidepressant.

schizophrenia need to be referred to a psychiatrist if possible. In other cases, if patients lack insight into their condition and refuse to acknowledge the psychiatric nature of their condition, it may be best for the dermatologist and patient to agree to part ways.

In summary, psychogenic pruritus can be challenging to classify from the outset and may require additional time for proper diagnosis. Once diagnosed, a trusting relationship with the patient along with close follow-up are key to working through possible treatment options. In certain cases, a dermatologist may not be the right person to treat the patient and referral to a psychiatrist is indicated.

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