CASE REPORT

Delusional hyperhidrosis: A case report and recommendations for management

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Key words: body dysmorphic disorder; delusions; delusional hyperhidrosis; hyperhidrosis; psychocutaneous.

INTRODUCTION

Delusional hyperhidrosis, a psychocutaneous disease in which patients complain of excessive sweating without objective findings, proposes a challenge for dermatologists to treat.1 Failure to recognize and manage this disorder may engender the excessive use of inappropriate medical resources, such as seeing multiple specialists and using therapies including botulinum toxin, as well as have serious impacts on patient quality of life.2

Here, we present a case of undiagnosed delusional hyperhidrosis that had led to the misuse of several medical treatments. We offer recommendations for the management of this disease and emphasize the importance of performing a physical examination in all patients reporting symptoms of hyperhidrosis.

CASE REPORT

A 75-year-old woman presented with sensations of generalized hyperhidrosis over the past year. She described feeling “hot all over” and “covered in slime,” reporting that her sweating episodes were severe enough to soak through her clothes and bedsheets. Oxybutynin, glycopyrrolate, solifenacin, hyoscyamine, topiramate, and clonidine had been prescribed by multiple previous providers without success, and laboratory workup was unremarkable. She was referred to dermatology for additional management.

On the day of presentation, she had discontinued all medications for hyperhidrosis for several months. During the physical examination, her skin was dry to touch despite reporting active sensations of sweating (Fig 1). Minor’s iodine-starch tests were performed on different areas of the body, all with a score of 0, showing anhidrosis (see Figs 2 and 3).3

In a discussion with her and her friend, who had accompanied her to the visit, these findings were reviewed. To demonstrate the function of the iodine-starch test, it was reperformed on the provider with a score of 1, showing initial, discrete sweating. The distinction between the sensation of sweating and active, quantitative sweating was explained, with emphasis that her sensations of hyperhidrosis were real and not being dismissed. Finally, perceived hyperhidrosis as a manifestation of other stressors was proposed, and she was referred to psychiatry.

Unfortunately, due to travel burden, she was unable to establish care within the system and was lost to follow-up after several unsuccessful attempts to reach her.

DISCUSSION

The classification of delusional hyperhidrosis as a subtype of essential hyperhidrosis with psychopathologic components of body dysmorphic disorder was first proposed by Kreyden et al1 in 2002. “Botulinophilia” was used to describe her obsessive demand for botulinum toxin, based on a study showing increased demand for the therapy in individuals with body dysmorphic disorder.2 While she

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Abbreviation used:

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DSM-V: Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition

SSRI: selective serotonin reuptake inhibitor

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did not express any specific request for this therapy, she fulfilled the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V) criteria for a delusional disorder with some elements of body dysmorphic disorder. Currently, there exist no diagnostic criteria for her specific delusion; however, she offers an important learning opportunity. Drawing from literature focused on psychocutaneous disorders, we propose the following initial approach in managing delusional hyperhidrosis:

**Rapport must be established with the patient**

Hyperhidrosis may have serious consequences on quality of life, and the provider must acknowledge the patient’s experiences. Eliciting the patient’s contextual narrative beyond the information typically collected in an encounter may not only allow for differentiation of physical hyperhidrosis from delusional hyperhidrosis but enables the physician to explore the emotional impacts of the disease, the patient’s social support structure, and the utility of possible treatments. When patients feel untrusting of providers who do not take time to listen to their complaints, this may lead to noncompliance and a desire for second opinions that ultimately lead to further misuse of medical resources. Discussing the diagnosis with a patient may be difficult, so practitioners should focus on being objective and neutral without perpetuating the delusion. We suggest stating to the patient that no symptoms of hyperhidrosis can be observed at this time, but this does not mean that their symptoms are being dismissed.

**Physical examination with or without Minor’s iodine-starch test should be performed in patients presenting with symptoms of hyperhidrosis without visible sweating**

Skin examination not only helps build rapport by demonstrating to the patient that their concerns are
being taken seriously but also helps the provider distinguish quantitative hyperhidrosis from sensations of hyperhidrosis, preventing complications such as overtreatment. Paralleling recommendations for skin biopsies in patients with delusions of parasitosis, we suggest the following 2 principles in performing Minor’s test: (1) the site of application should be chosen by the patient, and (2) a verbal contract should be established so that if the test is negative for hyperhidrosis, the patient will be open to discussing other etiologies and treatments for their symptoms.8 In our case, we also demonstrated the iodine-starch test on a provider to demonstrate its utility and to strengthen the patient-provider alliance.

**A collaborative approach with other providers and the patient’s own social supports may be used to further reinforce the nature of the diagnosis and treatment plans**

Our patient brought a companion to the visit, who not only provided emotional support but also helped the patient accept a possible psychiatric origin of her symptoms. Engaging psychiatry into the discussion or making a referral should be attempted, especially if the provider does not feel equipped to provide the full spectrum of psychodermatologic care needed.9 A combined, interdisciplinary treatment plan also reassures the patient that their symptoms are being acknowledged and warrant real medical care. Psychotherapy is indicated; however, little is known about the psychopharmacologic management of this particular disorder. Success with antipsychotics, such as pimozide in delusions of parasitosis, and selective serotonin reuptake inhibitors, as in body dysmorphic disorder and olfactory reference syndrome, suggests a potential use of these medications in the treatment of this disease.10 Ultimately, more research is needed to determine the possible benefit of these therapies.

**Conflicts of interest**

None disclosed.

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