

An Encapsulated Delusion of Photosensitivity

Malakouti M^{1,5}, Sorenson E^{2,5}, Brown G^{3,5}, Patel V^{4,5} and Leon A⁵

¹Chicago Medical School, Rosalind Franklin University of Medicine and Science, USA

²Keck School of Medicine, University of Southern California, USA

³College of Medicine, University of Arizona, USA

⁴School of Medicine, University of California, Irvine, USA

⁵Department of Dermatology, University of California, San Francisco, USA

*Corresponding author: Mona Malakouti, UCSF Psoriasis Treatment Center, 515 Spruce St. San Francisco, California 94118, USA, Tel: 4154764702; E-mail: mona.malakouti@my.rfums.org

Received Date: September 23, 2014, Accepted Date: November 10, 2014, Published Date: November 17, 2014

Copyright: © 2015, Mona Malakouti et al., This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Abstract

Background: Most dermatologic and psychiatric providers are familiar with the entity of delusional infestation (DI). DI involves the fixed, false belief that one is infested with animate or inanimate matter and is associated with abnormal cutaneous symptoms such as biting or crawling, in the absence of any objective evidence. Although DI is more commonly encountered and discussed in the psychodermatology literature, other types of less well-known encapsulated delusions occur. Patients may present with an isolated belief that they emit a foul odor, known as delusion of bromosis or that they have irregular, ugly or deformed body parts with delusion of dysmorphophobia. These types of delusions are currently classified as delusional disorder, somatic type within the most recent DSM-V.

Case: Herein, we report an unusual case of a middle-aged woman who presented to our outpatient psychodermatology clinic with a fixed, false belief that she had persistent and severe sensitivity to light. She had been evaluated by multiple providers for potential medical and dermatologic conditions that could account for her cutaneous symptoms of severe burning that were associated with thirst, subjective fever and self-reported elevations in blood pressure while in sunlight. All laboratory examinations, photo patch testing and skin exams were unremarkable. The patient pursued self-treatment with beta-carotene in surplus amounts, as a natural supplement to help decrease photosensitivity and photodamage that resulted in carotenemia and carotenosis of the skin. Based on current diagnostic criteria, she was diagnosed with delusional disorder, somatic type and treated with pimozide.

Conclusion: This case description aims to increase familiarity of providers, especially dermatologists to atypical presentations of somatic delusional disorders they may encounter in order to provide further guidance of treatment and approach to such cases.

Keywords: Delusion; Photosensitivity; Infestation; Disorder; Somatic

Introduction

Psychodermatological disorders are generally categorized into four broad categories: primary psychiatric, secondary psychiatric, psychophysiological, and cutaneous sensory disorders [1]. The most recognized psychodermatological disorder is delusional infestation, also known as delusions of parasitosis (DOP). Delusional infestation (DI) is characterized by a fixed belief that one is infested with living organisms or inanimate objects with associated abnormal cutaneous symptoms despite any objective evidence [2,3]. This false belief is usually categorized as a type of encapsulated somatic delusion. The treatment of DI usually involves a strong therapeutic rapport, antipsychotics such as pimozide or risperidone, and consultation with a psychiatrist [4,5].

Other well-known somatic delusions include olfactory reference syndrome, the belief that one emits a foul odor, that parts of the body are ugly, deformed or irregular, and finally that certain parts of the body are not functioning [6]. There are a few reports of other types of encapsulated somatic delusions in the psychodermatology literature,

such as Morgellon's or delusional tinea [7,8]. Although several somatic delusions have been described, clinical presentation of somatic delusions may be variable. Because patients with somatic delusions may present to dermatologists believing they have a dermatologic rather than a psychiatric disorder, it is imperative a primary dermatologic disease be ruled out with careful consideration of a primary psychiatric disease. Herein, we will report of an unusual case of a woman presenting with a fixed, false belief of photosensitivity to our outpatient dermatology clinic.

Case Report

A 64 year-old Asian-American woman presented to our outpatient dermatology clinic for evaluation of "sensitivity to light." The patient had a previous history of osteoarthritis and osteoporosis, with no prior history of mental illness. Beginning in her childhood, the patient described feeling that with sun exposure, she often felt feverish with disproportionate amounts of cutaneous pain, thirst, and subjectively reported elevations in blood pressure. To avoid sun exposure, the patient mostly stayed indoors, limiting exposure to daylight for only 15 minutes at a time while ensuring complete coverage of her skin

from head to toe. While indoors, she admitted to changing the light bulbs to a lower wattage to further dim the lights.

Prior to her visit at our outpatient psychodermatology clinic, she had been evaluated by numerous dermatologists, none of which were able to corroborate or identify a physical basis for her perceived sensitivity to light. Workups for porphyria, lupus and photo patch testing were completed, all of which were negative. She also discontinued any drugs that might cause photosensitivity such as non-steroidal anti-inflammatory medications. Finally, the patient tolerated a normal minimal erythema dose (MED) for her skin type when tested with UV light. In addition, for the last five years, the patient had been taking a surplus of beta-carotene supplements that she felt helped alleviate the severity of her symptoms associated with exposure to sunlight, which consequently resulted in mild hepatitis and carotenemia.

The patient appeared quiet, reserved, polite and slightly anxious. She was well-dressed, her speech was well-paced, and her thoughts were goal-directed and linear. She did not express any bizarre ideations and endorsed no auditory or visual hallucinations. Though we discussed the lack of supporting evidence for her experience of cutaneous photosensitivity, the patient was very adamant that her symptoms were very real and distressing. On physical examination, her skin was clear with no evidence of sunburn or extensive sun damage. She had orange-tinged discoloration of her skin that was most evident on her face and palms of her hands. The patient expressed great frustration with the negative impact of her symptoms on her life and the inability of physicians to aid in the diagnosis and treatment of her debilitating condition. Since the patient was able to tolerate exposure to UV light administered by a dermatologist and because her physical examination and previous work ups illustrated no support for cutaneous photosensitivity, a psychiatric diagnosis was pursued. The patient was diagnosed with delusional disorder, somatic type and started on a low dose of pimozide 1 mg with increasing titrations over a few weeks with report of initial improvement.

Discussion

Our patient had no underlying medical problems that could account for her reported sensitivity to light. Although her somatic symptoms of burning, thirst, increased heart rate, and subjective fever may have occurred, it is likely to have resulted from anxiety she experienced while being in the sunlight. These symptoms occurred with light exposure outdoors or when she was in close proximity to light bulbs indoor. The patient was preoccupied by her photosensitivity to light, rather than the associated somatic symptoms making the diagnosis of somatization disorder less likely [6].

Several other diagnoses were considered in her differential, including general medical conditions that could account for her symptoms such as porphyria, lupus or drug induced photosensitivity. However, previous work-ups and her skin exam failed to show any evidence of a primary dermatologic disease, other than the carotenosis of her skin that could be explained by her supplementation with beta-carotene. Interestingly, the patient had researched and was knowledgeable on the beneficial photo-protective effects of carotenoids, which have been reported to prevent oxidative damage resulting from sun exposure [9,10]. Besides causing carotenosis of the skin, the patient's excessive supplementation with beta-carotene resulted in carotenemia and elevated liver enzymes.

She had no evidence of any other bizarre thoughts, visual or auditory hallucinations, and negated the presence of any obsessions or compulsions. Given her presentation and our inability to substantiate her symptoms of photosensitivity, she was diagnosed with delusional disorder, somatic type according to the criteria met by the Diagnostic Statistical Manual of Mental Disorders V [6]. To our knowledge, no somatic delusion of photosensitivity has been described in the literature thus far.

Her presentation could also be identified as a type of monosymptomatic hypochondriacal psychosis (MHP), which was recognized by earlier versions of the DSM, as a type of somatic delusional disorder [11]. MHP is characterized by a delusional idea that an abnormality exists in the function of the skin or body, and is a form of encapsulated psychosis with a hypochondriacal component [12,13]. The treatment of MHP as well as somatic delusions typically involves treatment with antipsychotic medications. Effective treatment of MHP has demonstrated with the use of pimozide risperidoneolanzapine and other antipsychotics. Treatment with second generation antipsychotics is preferred because they cause less extrapyramidal side effects seen with first generation antipsychotics, though they may cause weight gain or metabolic disorders such hyperlipidemia and diabetes. Still, first generation antipsychotics remain an effective and relatively safe alternative when used at low doses. Length of treatment is typically 4-6 months though some patients are more prone to relapse and require longer treatment courses [14-18].

Because our patient could not appreciate a psychologic component for her disease, she disagreed to treatment with newer second-generation anti-psychotic medications. She was willing to try pimozide on a trial-and-error basis, since it is FDA indicated for the neurologic disorder, Tourette syndrome [19]. Thus, we treated her for unusual presentation with a persistent delusion of photosensitivity with low doses of pimozide, an effective first-generation anti-psychotic and our closely following her up for clinical improvement.

Conclusion

In the field of psychodermatology, providers are faced with patients who present with a dermatologic complaint that may be more appropriately defined by a psychiatric component. These patients have seen numerous physicians in search of identifying a cause for their symptoms. Management of these patients can be quite difficult, because they lack insight into the psychological component of their disease and as a result refuse psychiatric referral or treatment. Although the classic case of DI is often discussed among the psychodermatologic community, other unusual encountered delusions exist and may be under-recognized. Thus, we present a case of a middle-aged woman who had a debilitating fixed, false delusion of severe photosensitivity in order to expand knowledge and recognition of atypical case presentations that both psychiatrists and dermatologists may encounter.

References

1. Leon A, Levin EC, Koo JYM (2013) Psychodermatology: An Overview. *Seminars in Cutaneous Medicine and Surgery* 32: 64-67.
2. Heller MM, Wong JW, Lee ES (2013) Delusional infestations: clinical presentation, diagnosis and treatment. *Int J Dermatol.* 52: 775-783.
3. Levin EC, Gieler U (2013) Delusions of parasitosis. *Semin Cutan Med Surg* 32: 73-77.

4. Koo JYM, Do JH, Lee CS (2000) Psychodermatology. *Journal of the American Academy of Dermatology* 43: 848-853.
5. Heller MM, Murase JE, Koo JYM (2011) Time and Effort to Establish Therapeutic Rapport With Delusional Patients. *Archives of Dermatology* 147: 1046-1046.
6. Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) (2013) Arlington, VA: American Psychiatric Association.
7. Geddes ER, Rashid RM (2008) Delusional tinea: a novel subtype of delusional parasitosis. *Dermatology online journal* 14:16.
8. Harvey WT (2007) Morgellons disease. *J Am Acad Dermatol* Apr 56: 705-706.
9. Stahl W, Sies H (2002) Carotenoids and protection against solar UV radiation. *Skin pharmacology and applied skin physiology* 15: 291-296.
10. Bafteh PR, Siegesmund M, Hanneken S, Neumann NJ (2012) Protective effects of beta-carotene and melanin against protoporphyrin IX-induced phototoxicity in the photo hen's egg test. *Photodermatology, photoimmunology & photomedicine*. 28: 12-16.
11. Ajiboye PO, Yusuf AD (2013) Monosymptomatic Hypochondriacal Psychosis (somatic delusional disorder): a report of two cases. *African journal of psychiatry*. Mar 16: 87-89.
12. Atilganoglu U, Ugurad I, Arikan M, Ergun SS (2006) Monosymptomatic hypochondriacal psychosis presenting with recurrent oral mucosal ulcers and multiple skin lesions responding to olanzapine treatment. *Int J Dermatol* 45: 1189-1192.
13. Munro A (1988) Monosymptomatic hypochondriacal psychosis. *The British journal of psychiatry*. Supplement 37-40.
14. Munro A (1978) Monosymptomatic hypochondriacal psychoses: a diagnostic entity which may respond to pimozide. *Canadian Psychiatric Association journal* 23: 497-500.
15. Cetin M, Ebrinc S, Agargun MY, Yigit S (1999) Risperidone for the treatment of monosymptomatic hypochondriacal psychosis. *The Journal of clinical psychiatry* 60: 554.
16. Chand PK, Anand S, Murthy P (2005) Monosymptomatic hypochondriacal psychosis: atypical presentation and response to olanzapine. *The Journal of clinical psychiatry* 66: 800-801.
17. Weintraub E, Robinson CA (2000) case of monosymptomatic hypochondriacal psychosis treated with olanzapine. *Annals of clinical psychiatry : official journal of the American Academy of Clinical Psychiatrists* 12: 247-249.
18. Ikenouchi A, Terao T, Nakamura J (2004) A male case of monosymptomatic hypochondriacal psychosis responding to olanzapine: a case report. *Pharmacopsychiatry* 37: 240-241.
19. Heller MM (2011) KJYM. *Delusions of Parasitosis*. Newton: Handbooks in Health Care Company.