

The Spectrum of Ideation in Patients with Symptoms of Infestation: From Overvalued Ideas to the Terminal Delusional State

Gabrielle E. Brown^{1,2*}, Eric Sorenson^{2,3}, Mona Malakouti^{2,4}, Argentina Leon², Jason S. Reichenberg⁵, Michelle Magid⁶, Josephine L. Howard⁷, Jenny E. Murase^{2,8} and John Y.M. Koo²

¹College of Medicine, University of Arizona, USA

²Department of Dermatology, University of California San Francisco, USA

³University of Southern California, USA

⁴Chicago Medical School, North Chicago, USA

⁵Department of Dermatology, University of Texas Southwestern - Austin, USA

⁶Department of Psychiatry, University of Texas Southwestern - Austin, USA

⁷Department of Psychiatry, University of California San Francisco, USA

⁸Department of Dermatology, Palo Alto Foundation Medical Group, USA

*Corresponding author: Gabrielle E. Brown, College of Medicine, University of Arizona, 515 Spruce Street, San Francisco, CA 94118, USA, Tel: 415-476-3396; E-mail: gebrown@email.arizona.edu

Received date: July 28, 2014, Accepted date: Sept 27, 2014, Published date: Oct 3, 2014

Copyright: © 2014 Gabrielle Brown 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

Delusional infestation (DI) is a type of monosymptomatic hypochondriacal psychosis characterized by the steadfast belief that one is infested with living organisms or inanimate material in the absence of objective proof. Although DI is generally regarded as a single psychotic phenotype characterized by either the presence or absence of a delusion, our experience has been that patients with DI present with varying levels of severity represented by various phenotypes along a continuum. Distinguishing where a particular patient presents on this spectrum has allowed us to modify our approach with greater sophistication and thereby optimize management. Our aim is to describe for the first time in dermatology the concept of the DI continuum with support from the psychiatric literature, and to provide practical therapeutic recommendations for each phenotype in the spectrum.

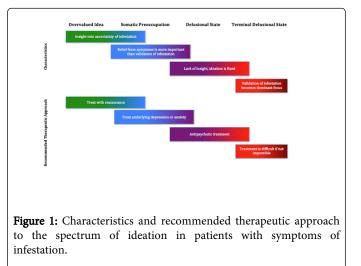
Introduction

Delusional infestation (DI), also known as delusions of parasitosis, is a type of monosymptomatic hypochondriacal psychosis characterized by the false yet steadfast belief that one is infested with living organisms or inanimate material. Although DI is generally regarded as a single psychotic phenotype characterized by either the presence or absence of a delusion, the variability in delusional beliefs regarding the source of infestation was recently described to represent a heterogeneous diagnostic group of patients [1]. Similarly, our experience has been that patients with DI present with varying levels of severity represented by various phenotypes along a continuum.

There is evidence in the psychiatric literature that psychosis exists as a continuum. In fact, the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5) acknowledges increasing evidence regarding dimensional concepts in mental illness and the need to supplement conventional diagnostic criteria with an approach that recognizes varying levels of severity on a continuum [2]. Perhaps the most compelling observation supporting the psychosis continuum theory is the documentation of routine and intermittent delusional ideations in 10-15% of the general population [3]. An example would be an isolated occurrence of a plausible yet mistaken persecutory or paranoid belief in an individual with no history of psychosis. The Peters Delusion Inventory is a validated psychometric instrument specifically developed to measure delusional ideation in the nonclinical population [4]. When administered to normal and delusional groups, there was considerable overlap in scores, as would be expected in a continuum [4]. Furthermore, delusion-prone individuals have been shown to have reasoning biases similar to those in delusional patients, such as jumping to conclusions [5]. This

suggests that aberrations in logic may contribute to eventual delusion formation.

Although DI is considered to be a psychotic condition, it has never been characterized as a continuum. Distinguishing where a particular patient presents on this spectrum has allowed us to modify our approach with greater sophistication and thereby optimize management. To make the concept of a DI spectrum tangible for the practicing dermatologist, we describe four psychological constructs with corresponding recommendations for the optimal therapeutic approach (Figure 1).



The characteristics of ideation as described by each psychological construct overlap in the DI spectrum, necessitating different therapeutic strategies.

Spectrum of Delusional Infestation: Description and Therapeutic Approach

Overvalued idea: An overvalued idea is a solitary unfounded belief that is differentiated from psychosis based on the significantly lesser extent of intensity and conviction. The patient feels cutaneous crawling, stinging, or biting, and is concerned that these symptoms indicate an infestation, but can be easily reassured otherwise by the dermatologist. Such a patient is often happy to accept a definitive alternative diagnosis that explains their symptoms, such as dermatitis.

Somatic preoccupation: A patient with somatic preoccupation is fixated on a subjective cutaneous symptom but does not meet criteria for diagnosis of DI. They may or may not meet criteria for somatic symptom disorder. As underlying psychological distress can manifest in a somatic manner, some of these patients suffer from depression, post-traumatic stress disorder, or feelings of guilt. These patients may have suffered from their cutaneous symptoms for a period of time and may have experienced a recent exacerbation temporally related to psychological stressors. Somatic preoccupations with other organ systems may be present. They may be easily mistaken to be delusional, particularly if defensive or antagonistic. However, the patient may change his or her belief if they feel that they have undergone thorough evaluation and are respected by the clinician. After developing a trusting therapeutic rapport with the patient, the provider can diplomatically challenge the patient's beliefs. The clinician can help the patient gain acumen into the uncertainty of the infestation and articulate that relief from symptoms is more important than affirmation of infestation. These patients can benefit from psychological counselling or treatment with antidepressants, which may prevent further somatic preoccupation.

Delusional state: In the delusional state, the false belief is held with fixed, immutable conviction despite all efforts by the dermatologist to persuade otherwise. Though occasionally a new problem, the patient often reports that they have suffered from symptoms for months or longer. If the patient admits to attempting inappropriate treatments, such as gasoline, Borax, or burning themselves (with fire or chemicals), they are likely in the overtly delusional category or in the terminal state described below. However, while remaining adamant that they have an underlying infestation, the patient has a desire for symptomatic relief that overrides the need for delusional validation; therefore, the patient is still receptive to treatment. One must diplomatically broach the topic of antipsychotic treatment in order to avoid alienating the patient; for example, one could consider recommending a medication on a trial-and-error basis.

Terminal delusional state: We propose adding the word "terminal" to designate the most rigid and severe delusional patient. Terminally delusional patients have almost always experienced their symptoms for many months or years. Most characteristically, validation is the primary motivation for seeking care, and whether treatment can ameliorate distress is secondary in importance to the patient. Delusions described by the most severe patients tend to be elaborate with bizarre content and vivid details. When offered treatment to address their abnormal sensations or improve their quality of life, they will decline intervention as it does not "prove the bugs are real". Recruiting the expertise of a psychiatrist via referral or collaborative multidisciplinary approach is optimal but difficult given the lack of patient insight into the psychiatric nature of the symptoms. The best scenario the dermatologist may hope for is an amicable parting since such a patient may be impossible to motivate for treatment. Alternatively, the dermatologist may offer general dermatological care in addition to reassurance at each visit that the infestation is not present that day.

Conclusion

The variation in clinical psychological states in DI represents a need for a more sophisticated diagnostic system that does not neglect individuals with intermediary symptoms. The awareness on the part of the dermatologist that such a spectrum exists and the ability to adjust one's approach accordingly will prove invaluable in optimizing management for this therapeutically challenging condition.

Conflict of interest disclosures:

JYMK is a speaker for AbbVie and Leo and conducts research for Amgen, Janssen, Novartis, Photomedex, Galderma, Pfizer and Merck.

References

- 1. Reichenberg JS, Magid M, Jesser CA, Hall CS (2013) Patients labeled with delusions of parasitosis compose a heterogenous group: a retrospective study from a referral center. J Am Acad Dermatol 68: 41-46.
- 2. Association AP (2013) Diagnostic and statistical manual of mental disorders. 5th Edn. Arlington VA (Ed.) American Psychiatric Publishing.
- 3. Freeman D (2006) Delusions in the nonclinical population. See comment in PubMed Commons below Curr Psychiatry Rep 8: 191-204.
- Peters ER, Joseph SA, Garety PA (1999) Measurement of delusional ideation in the normal population: introducing the PDI (Peters et al. Delusions Inventory). Schizophr Bull 25: 553-576.
- Warman DM, Lysaker PH, Martin JM, Davis L, Haudenschield SL (2007) Jumping to conclusions and the continuum of delusional beliefs. Behav Res Ther 45: 1255-1269.

Page 2 of 2