Diagnostic and Therapeutic Pitfalls of Psychodermatoses: A Case Report

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ABSTRACT

Background: Psychological distress as a common corollary of skin diseases is well established in the medical literature. What is less commonly discussed are dermatoses that are primarily psychiatric and the challenges of diagnosing and treating such conditions in dermatology practice. Because patients with primary psychiatric disorders often present first to the dermatologist with dermatoses that may mimic purely dermatologic disorders, it is expedient that dermatologists are conversant with the psychopathological component of skin diseases. This will help avert needless investigations, misdirected treatments, and unsatisfactory therapeutic outcomes.

We present two patients with previously undiagnosed psychiatric disorders referred to the dermatology clinic with a long history of hospital hopping, countless laboratory investigations, and repeated unsuccessful treatments for onchodermatitis and scabies. Both patients were diagnosed with underlying primary psychiatric illness but declined referral for psychiatric consultations. Desired clinical response was achieved following appropriate psychotherapeutic interventions.

This case report underscores the diagnostic and therapeutic challenges of psychodermatoses. A consideration for underlying psychiatric morbidity should be given in dermatology patients presenting with poor clinical response to standard therapy for apparently "uncomplicated" dermatologic conditions.

Keywords: Psychodermatoses, Psychological distress, Psychiatric disorders, Psychotherapy, Diagnostic and therapeutic pitfalls.

Les Pièges Diagnostiques et Thérapeutiques des Psychodermatoses: Un Rapport de Cas

Abstrait:

La détresse psychologique en tant que corollaire commun des maladies de la peau est bien établie dans la littérature médicale. Ce qui est moins souvent discuté, ce sont les dermatoses qui sont principalement psychiatriques et les défis du diagnostic et du traitement de ces affections dans la pratique de la dermatologie. Étant donné que les patients atteints de troubles psychiatriques primaires se présentent souvent d'abord au dermatologue avec des dermatoses qui peuvent imiter des troubles purement dermatologiques, il est opportun que les dermatologues connaissent la composante psychopathologique des maladies de la peau. Cela aidera à éviter des investigations inutiles, des traitements mal orientés et des résultats thérapeutiques insatisfaisants.

Nous présentons deux patients atteints de troubles psychiatriques non diagnostiqués auparavant, référés à la clinique de dermatologie avec une longue histoire de sauts d'hôpital, d'innombrables examens de laboratoire et des traitements répétés infructueux pour l'onchodermatite et la gale. Les deux patients ont reçu un diagnostic de maladie psychiatrique primaire sous-jacente, mais ont refusé d'être orientés vers des consultations psychiatriques. La réponse clinique souhaitée a été obtenue après des interventions psychothérapeutiques appropriées.

Ce rapport de cas souligne les enjeux diagnostiques et thérapeutiques des psychodermatoses. Il convient de tenir compte de la morbidité psychiatrique sous-jacente chez les patients en dermatologie présentant une faible réponse clinique au traitement standard pour des affections dermatologiques apparemment « non compliquées ».

Mots-clés:

Psychodermatoses, Détresse psychologique, Troubles psychiatriques, Psychothérapie, Pièges diagnostiques et thérapeutiques.

Introduction

Psychodermatology is an evolving subspecialty born out of increasing recognition of the enormous impact of psychological and psychiatric factors on skin diseases. It is a discipline devoted to addressing the deficits in the traditional management of psychocutaneous disorders by integrating psychiatry/psychology into the practice of dermatology.[1,2] Psychocutaneous disorders encompass a diverse range of skin diseases that are either caused, aggravated, or influenced by the presence of underlying or associated psychiatric illness and/or psychological stress.

The diagnosis of psychodermatoses, particularly primary psychiatric dermatoses can be challenging. The patient may present to the dermatologist with lesions mimicking primary skin diseases whilst the underlying psychiatric component may be obscure and as such may be easily missed. In addition, psychiatric illness may influence how cutaneous symptoms are perceived by an individual as well as the individual's attitude and reaction to the disease.[3–5] Furthermore, mental ill health can interfere with the reliability of the medical history obtained as well as the patient's ability to adhere to treatment regimens. Hence, a good understanding of the psychopathology of skin diseases is required to accurately address and manage psychodermatological disorders.

Sadly, training and exposure to psychocutaneous medicine are low and knowledge about the treatment and diagnosis of psychocutaneous diseases is inadequate among psychiatrists and dermatologists alike.[6,7] Research has shown that even after diagnosing psychocutaneous problems, many dermatologists are reluctant to prescribe antipsychotic drugs.[8] As such, subtle psychiatric symptoms in dermatology patients tend to be overlooked, and the treatment of such when identified is delayed, inadequate, or inappropriate.

We present two case summaries of patients referred to our dermatology clinic as "difficult-to-treat" infectious dermatoses. We highlight both overt and subtle psychiatric symptoms in these patients and emphasize the importance of early diagnosis, timely and appropriate psychotherapeutic interventions in improving treatment outcomes, patient satisfaction, and overall quality of life. The aim is to stimulate the interest of dermatologists as well as general practitioners in this complex but important aspect of skin diseases that are often overlooked yet has an enormous impact on treatment outcome.

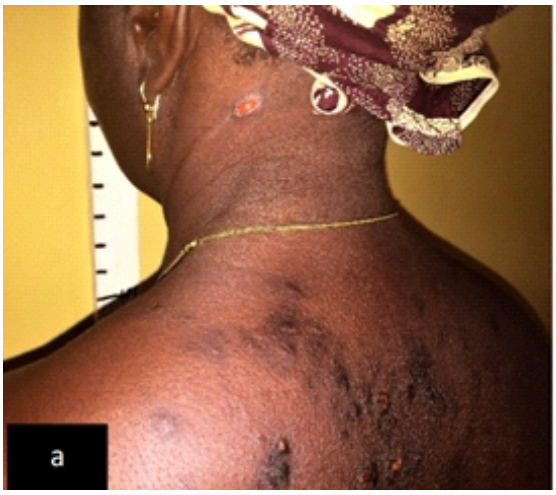
Case Report

Case 1

A 58-year-old widow was referred to the dermatology clinic with 3 years history of recurrent generalized pruritic skin rashes that healed with troublesome hyperpigmentation. Her symptoms started shortly after she attained menopause when she developed generalized pruritus and crawling body sensation. She could not identify triggers for her symptoms or relieving factors. She believed they were caused by mites or worms crawling under her skin. She, therefore, resorted to various strategies including pinching, nipping, and scaping her skin with sharp objects to remove the parasites. She had no history of atopy, photosensitivity, or drug allergies and was not on routine or long-term medications. She had never been diagnosed with a psychiatric disorder, she did not consume alcohol, smoke cigarette, or use recreational drugs. She resided alone in a modest apartment and had no close contact with persons with similar symptoms.

During her illness, she visited several hospitals and had numerous laboratory tests including retroviral screening, serology for syphilis and hepatitis, assays for antinuclear antibodies, blood culture, skin snip test, stool microscopy, and full blood count which all yielded normal findings. She was given ivermectin and diethylcarbamazine at varying intervals for onchocerciasis. She had also been treated for scabies with benzyl benzoate and was on antibiotics for suspected bacterial skin infections. She was finally referred to the dermatologist due to persistent symptoms in the absence of objective laboratory evidence of infections or infestations.

At presentation, the patient came with the results of previous blood work done as well as "evidence" of some of the parasites she had removed from her skin wrapped in a white handkerchief. On further



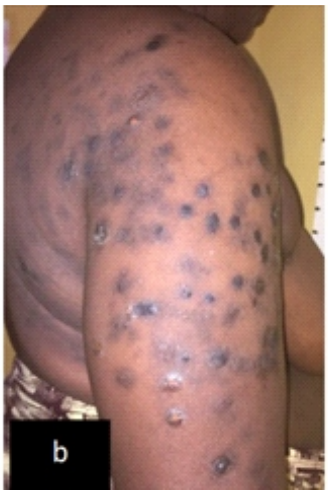


Figure 1a and b: multiple excoriated papules inflicted by skin picking in the patient Interspersed with post-inflammatory hyperpigmentation from previous lesions at the initial consultation.

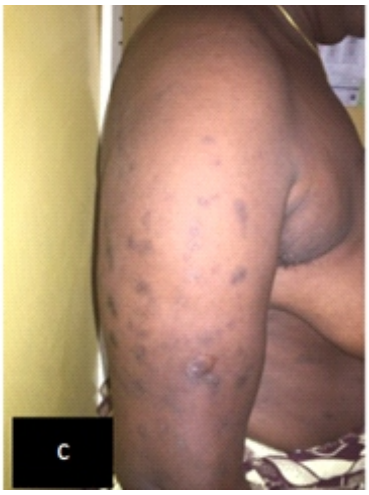


Figure 1c shows the same patient after 3 months on tricyclic antidepressants.

questioning, she revealed she had been experiencing poor sleep and occasionally had weeping spells. She admitted that she was lonely and unhappy and was still struggling to adjust to her life without her husband who passed on 5 years earlier. Physical examination revealed a middle-aged female with depressed affect. She had multiple freshly excoriated papules limited to her mid-upper back, neck, and right shoulder interspersed with post-inflammatory hyperpigmented macules (**Figure 1a-b**). Cardiovascular, respiratory, and abdominal examinations were all normal.

Given the patient's history suggestive of clinical depression, the classical demonstration of the matchbox sign (in this patient manifested as skin particles wrapped in a handkerchief), and the absence of laboratory evidence of an alternative explanation for the patient's symptoms, A diagnosis of delusion of parasitosis (Ekbom syndrome) was made. She was offered counseling and psychological support and advice on the need for further evaluation by a psychiatrist/psychologist. She declined referral to the psychiatrist but accepted a prescription of antidepressants; 25mg amitriptyline nocte and regular follow-up visits. By her 3rd month of follow-up, her affect had improved significantly, she was sleeping better, the delusions had resolved and she had stopped picking her skin. (**Figure 1c**)

Case 2.

A 43-year-old Christian male teacher presented to the dermatology clinic with 12 years history of crawling body sensation and burning sensation in the phallus following sexual intercourse with his wife. He strongly believed that his symptoms were a result of the sexually transmitted infection (STI) acquired from his wife (who based on this assumption had been subjected to numerous clinical evaluations and laboratory tests with no significant findings). The patient had undergone similar investigations with normal laboratory results and had been treated severally with empirical antibiotics for STIs by chemists and at various hospitals with no significant improvement in symptoms. Further questioning revealed that though the patient had been faithful to his partner, he felt guilty due to his religious beliefs about sexual encounters he had before marriage. He was morbidly afraid of acquiring infections, particularly STIs, and paid meticulous attention to his hygiene and self-grooming.

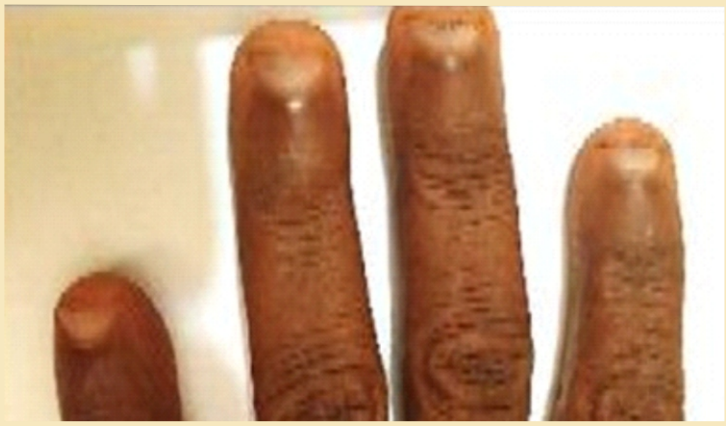


Figure 2: Brachyonychia secondary to pathological nail grooming (onychotillomania)

On examination his demeanor was anxious, he had no specific skin rashes however he was noticed to have extremely short fingernails (Figure 2). He alluded to biting his nails when anxious and also tended to deliberately cut his nails short for fear of infections. Tests for STIs and other forms of parasitoses were negative. His blood work including blood count and fasting blood glucose was also normal. He was diagnosed with multiple primary psychiatric psychocutaneous disorders as follows:

a. Body-focused repetitive disorders (BFRDs) onychophagia and onychotillomania with brachyonychia),
b. Cutaneous sensory syndrome [formication] and
c. Venereophobia with an underlying anxiety disorder.

The patient was counseled and reassured that although his symptoms were real, they had a large psychological component. He initially refused referral to the psychiatrist, however after several visits to the dermatology clinic during which rapport was built and psychological support offered, patient accepted to see a psychiatrist who made an additional diagnosis of obsessive-compulsive disorder and instituted psychotherapy to which the patient responded satisfactorily.

Discussion and Literature Review

The psychopathological component of skin diseases plays an important role in clinical presentation and response to treatment. Here, we illustrated two cases of psychocutaneous disorders in which the desired therapeutic response was achieved only after the psychological aspects of their skin diseases were addressed. Both subjects presented to the dermatology clinic with primary psychiatric psychodermatoses and expressed aversion to psychiatric consultation. Although they both shared a common symptom of crawling body sensation, the underlying psychopathology was different in either case. Case 1 was a delusional disorder triggered by depression while in Case 2, the tactile hallucinations were caused by an anxiety disorder. Hence, different treatment modalities were required for their symptoms.

Relationship between mental health and skin diseases.

The interaction between skin health and mental health is complex and incompletely understood. Skin diseases have enormous psychosocial consequences and about 25 – 87% of patients seeking medical treatment for skin disorders have an associated psychiatric morbidity[9,10]. Similarly, the burden of dermatoses is unnervingly high among psychiatric patients.[11,12] The significant involvement of the nervous system in skin biology, homeostasis, and disease,[13–15] may contribute to the close link between skin diseases and psychiatric disorders. The skin is richly innervated with sensory and autonomic nerve fibers that produce regulatory molecules including neurotrophins, neuropeptides, and neurotransmitters that have effects both centrally on mental health function and peripherally on the skin.[13,15]

Depression, emotional stress, and anxiety are psychiatric symptoms found most often in association with skin diseases, acting either as triggers, exacerbating factors, or occurring as a consequence of dermatoses.[9,16] These disorders may complicate skin diseases in the following ways:

i. As a direct consequence of pathological processes involved in the primary skin disease such as systemic lupus erythematosus manifesting with neuropsychiatric symptoms.
ii. As a reaction to disfigurement or perceived social stigma as may be observed in patients with vitiligo or neurofibromatosis.
iii. As a consequence of undesirable changes in lifestyle imposed by the skin disease such as the need to avoid certain inciting agents in patients with allergic contact dermatitis and exclusion from prolonged outdoor activities in persons with albinism.[9]

On the other hand, dermatoses may complicate or develop as a consequence of primary psychiatric disorders as exemplified by Gardner-Diamond syndrome and Ekbom syndrome.[17,18] At other times the temporal relationship between skin diseases and psychiatric symptoms may be difficult to establish and both conditions may occur simultaneously and exert bidirectional influence on each other.

The Challenges of Managing Psychocutaneous Disorders

Given the high burden of psychological and psychiatric symptoms among dermatology patients, it is only rational that psychological interventions and psychiatric consultations be included in patient management plans, particularly in those presenting with psychodermatoses to the dermatologist. However, the treatment of cutaneous disorders in the context of psychiatric disorders can be both complex and challenging.

For instance, in patients with primary psychiatric disorders with dermatology complaints, the underlying mental component of the illness may cause a lack of motivation, distrust, and fear that may delay clinical presentation, interfere with the initiation of treatment, and increase the risk of loss to follow-up.[19] Similarly, those with psychophysiological disorders such as atopic dermatitis may experience frequent exacerbations or poor symptom control as a consequence of psychological stress caused by their cutaneous symptoms leading to a revolving cycle of poor symptom control and psychological distress.

Very few dermatologists are sufficiently equipped to deal with the challenges of diagnosing or providing proper psychotherapeutic interventions to patients with significant mental ill-health problems presenting to them.[20–23] Most will refer the patients for psychiatric consultation. Unfortunately, a high proportion of subjects with psychodermatoses decline referral to the psychiatrist.[24] Therefore, the burden of initiating treatment often rests with the dermatologist. Caution must however be exerted, and a balance struck when dealing with patients with primary psychiatric psychocutaneous disorders. It is important not to dismiss or ignore the patient's symptoms as this may lead to distrust and hospital hopping. However, it is equally important not to validate the patient's delusions as this will only reinforce their symptoms and cause further clinical deterioration.[25] The physician must demonstrate empathy and a sufficient grasp of the patient's concerns to build rapport, trust, and eventually the therapeutic alliance required to accomplish the desired clinical outcome.[25]

Multidisciplinary care is necessary for the majority of patients with concurrent mental and dermatological problems, but this can be difficult to provide in the context of traditional autonomous dermatology and psychiatry clinical practice, which requires a referral from one clinic to another. The solution to the challenges of providing holistic care to patients with psychodermatoses may lie in hybrid "psycho-dermatology" clinics, where patients can have consultations with dermatologists, psychiatric specialists, and psychologists concurrent.[26] Such clinics will also provide an opportunity for training dermatology residents in psychodermatology in addition to creating opportunities for inter-disciplinary collaboration and research to improve our understanding of psychocutaneous disorders.

Conclusion

The burden of skin diseases often extends beyond the physical symptoms experienced by the patient to include psychological, social, and sexual elements. As such, treatment of skin diseases should incorporate measures to address psychosocial factors that may aggravate, perpetuate or complicate skin diseases. The dermatologist needs to be knowledgeable enough to identify the underlying psychiatric components of skin diseases as well as provide basic psychotherapeutic interventions until transfer to the psychiatrist is feasible**.** The creation of psychodermatology clinics will further improve the access of patients with psychodermatoses to appropriate multidisciplinary care and improve clinical outcomes.

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