Dermatitis simulata as a clinical presentation for an underlying Munchausen syndrome: A case report

RONAK SAEED AHMED[1,2], YADGAR N. ABBAS[1,3], SHVAN OMAR SIDDIQ[2], SASAN M. AHMED[1,4], SHAHO F. AHMED[1], JIHAD IBRAHIM HAMA[5], KAROKH FADHIL HAMAHUSSEIN[1], HEMIN S. MOHAMMED[1], BERUN A. ABDALLA[1,4] and FAHMI H. KAKAMAD[1,4,6]

[1]Department of Scientific Affairs, Smart Health Tower; [2]Shahid Nabaz Dermatology Teaching Center for Treating Skin Diseases, Sulaimani Directorate of Health; [3]Mental Health Treatment Center; [4]Kscien Organization for Scientific Research, Sulaimani, Kurdistan 46001; [5]Research Center, University of Halabja, Halabja 46018; [6]College of Medicine, University of Sulaimani, Sulaimani, Kurdistan 46001, Iraq

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Abstract. Munchausen syndrome, also known as factitious disorder imposed on self, is a psychiatric disorder involving various types of skin injuries, as the skin is a visible organ that can be easily observed. On the other hand, dermatitis simulata refers to conditions in which individuals only simulate and mimic skin diseases using external disguises without causing significant damage to the skin. The present study reports a rare case of dermatitis simulata in a young female, as a clinical presentation of Munchausen syndrome. An 18-year-old female patient had persistent red skin lesions around her eyes for 6 months. Despite multiple specialist visits and treatments, no improvement was observed. The lesions were determined to be caused by makeup, which was successfully cleaned with alcohol. A psychiatric evaluation revealed no extraordinary perceptual abnormalities apart from some concerns that she will lose her sight as no one could diagnose her condition. Patient education, reassurance and consistent care were crucial for successful treatment. Munchausen syndrome is a severe factitious disorder characterized by dramatic and untruthful illness stories. It is more common among females, individuals in early adulthood and in those with underlying psychiatric issues or stress. Patients often present with neurological and abdominal complaints, while dermatological manifestations are rare. Munchausen syndrome can be presented as dermatitis simulata that can be manifested by creating red skin lesions using makeup to satisfy psychological demands.

Correspondence to: Dr Fahmi H. Kakamad, College of Medicine, University of Sulaimani, HC8V+F66, Madam Mitterrand Street, Sulaimani, Kurdistan 46001, Iraq
E-mail: fahmi.hussein@univsul.edu.iq

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Introduction

Dermatitis artefacta or factitious dermatitis is a psychocutaneous disorder in which patients intentionally create lesions on the skin, nails or mucosae for a psychological demand, to attract attention, or to escape responsibility. It is known as Munchausen syndrome if the patient tries to satisfy a psychological demand by receiving medical attention (1,2). These patients usually use sharp objects and irritating chemicals to create lesions in the accessible area that exhibit symmetry and irregular shapes, while the surrounding skin appears normal. The lesions may mimic dermatological conditions and commonly appear as redness, ulcers or gangrene. Subcutaneous emphysema or lymphedema, secondary infections and septicemia can emerge as complications (1,3). Dermatitis simulata is a condition in which an individual creates apparent skin disease using an external agent to simulate a known skin disorder. This behavior is often associated with factitious disorder, which is characterized by a psychological need for medical attention. Some external agents that may induce temporary skin discoloration are cosmetics, crystallized sugar and glue printing dyes, which can be easily cleared with alcohol swabs (3).

Dermatitis artefacta is frequently not noticeable, making it challenging to accurately determine its prevalence. According to a previous study, which was conducted in Iran, found a relative incidence of 6.7% among patients with psychodermatological disorders (4). While this condition can manifest at any age, it is more commonly observed in early adulthood, following adolescence (5). Moreover, it tends to occur more frequently among females, with reported female-to-male ratios ranging from 2.8:1 to 20:1 in various studies (5,6). Additionally, a higher prevalence is noted among females from lower socioeconomic backgrounds (7). In these conditions, it is necessary to conduct a detailed psychiatric assessment to determine malingering when the patient has a hidden motive to intentionally exaggerate or fabricate their symptoms for personal advantage. Of note, malingering is not a medical term and was not listed as a diagnosis in DSM-5 (8). Malingering is

distinguished from factitious disorders through the deliberate presentation of symptoms for personal benefits, such as financial gain or time off work. By contrast, diagnosing factitious disorders necessitates the absence of apparent rewards (1). As a result of insufficient knowledge and the understanding of psychocutaneous disorders among family physicians, internists and other specialists, this may lead to misdiagnosis or delayed diagnosis (3).

The present study reports a rare case of dermatitis simulata in a young female. The references have been inspected for reliability (9).

Case report

Patient information. An 18-year-old female patient presented to the Smart Health Tower (Sulaimani, Iraq) with the recurrent overnight appearance of red skin lesions around the eyes, which had persisted for a duration of 6 months. She had visited numerous internists, ophthalmologists and ENT specialists. The patient received several topical and systemic treatments without any notable improvement. No history of trauma or abuse were reported and there was no previous history of any psychiatric disorders. In addition, there was no history of any reported psychiatric disorder in her family members. Apart from inquiring about the history of mental illnesses in her family, no relevant genetic information could be elicited. The client and her father declared that there were no any psychiatric illnesses reported in the 1st and 2nd degree relatives.

Clinical findings. Upon a physical examination, the patient was found to have a red skin lesion around the eyes with no associated systemic manifestations, such as fever or pain.

Diagnostic assessment. A baseline laboratory investigation yielded normal findings. Upon a dermatological examination, there were bilateral symmetrical large pink-red glistening patches on the periorbital skin, and other parts of the face were normal without similar lesions elsewhere in the body (Fig. 1). Although the patient denied the use of cosmetics, the exogenous color appeared to be a foundation (makeup), and it was removed by cleaning the area around the eyes with gauze and 70% alcohol; hence, a skin biopsy was not performed (Figs. 2 and 3).

Therapeutic intervention. The patient was referred for psychiatric evaluation as part of the management, according to which the patient did not have any extraordinary perceptual abnormalities. Structured Clinical Interview for DSM (SCID) was employed, which is a well-established diagnostic instrument within the mental health field. The SCID serves as a structured interview guide, facilitating the accurate and dependable diagnosis of psychiatric disorders. Its criteria align with the Diagnostic and Statistical Manual of Mental Disorders (DSM), rendering it a widely utilized tool in the field. Based on the evaluation, the only identified vulnerability factor in the tendency of this patient towards factitious disorders are rooted in underlying psychological issues. These issues include a craving for attention, a tendency to adopt the 'sick role', and a desire to be perceived as a patient within her extensive family. There were no signs of depression, although the patient expressed some concerns that she will lose her eyesight as no one could diagnose her condition (as several doctors had examined her over the past 6 months). There were no apparent motivations identified to encourage her misleading behavior. The patient and her father, who met privately, denied any personal advantages.

Figure 1. A female patient presented with bilateral symmetrical large pink-red patches on the periorbital skin.

Figure 2. The pink-red patches were cleaned with alcohol.

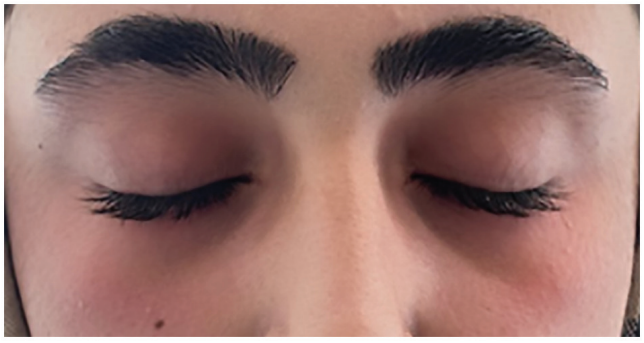

Figure 3. The periorbital skin showed normal without damage to the skin.

Follow-up. The patient was examined again after 2 months. There was no presentation of any lesions around her eyes, according to the examination of her skin and her parents, and no further psychological stresses were reported. The importance of patient education about her illness was clarified once again.

Discussion

Munchausen syndrome represents a chronic, severe subtype of factitious disease in which an individual presents a dramatic and untruthful story of illness (pathological lying) (10,11). It is commonly prevalent among females, individuals in early adulthood, people with underlying psychiatric diagnoses, or people who have experienced external stress. Healthcare professionals often witness this phenomenon, and the common psychiatric findings linked to this condition include borderline personality disorder, dependency and manipulative behavior (12,13).

Patients with this condition commonly experience neurological and abdominal complaints. The occurrence of dermatological manifestations is rare, which may be created by using sharp objects or chemicals that can mimic dermatological diseases, such as erythematous and ulcerative lesions or lymphedema. In rare cases, the initial presentation may involve subcutaneous emphysema or lymphedema. Secondary infections and septicemia can also arise from this lesion (1).

The main characteristic of these patients is a recurrent illness with the same complaint and presentation, hence visiting several specialties in different hospitals (1). Patients who have dermatitis simulata usually use cosmetics to create skin discoloration, which can be easily cleaned using alcohol swabs (14). The case presented herein exhibited painless pink discolorations around the eyes; the lesions were recurrent in the same anatomical distribution for a duration of 6 months. Psychocutaneous disorders are unfamiliar to other specialists, such as family physicians and internists and usually lead to a delay or missed diagnosis, as in the patient described herein, who visited different internists, ophthalmologists and otolaryngologists, yet received no definite diagnosis. Additionally, these deceptions are sophisticated enough to mislead and confuse doctors for months (3,15). The approach of the authors to this case involved collaboration between dermatologists, ophthalmologists and psychiatrists, ensuring a comprehensive understanding of the condition of the patient. This multidisciplinary approach allowed for a thorough examination of both the dermatological and psychological aspects of the case, contributing to a more holistic diagnosis and management plan.

In line with the literature, the patient in the present study was 18-year-old secondary school student diagnosed with dermatitis simulata. Her skin lesions did not appear to be a sign of any skin disease. In these cases, a psychiatrist monitors and follows up on their psychological condition, and recommends ongoing visits to the psychiatrist to provide psychotherapy sessions. The sympathetic method of the psychiatrist and the provision of a confidential environment can assist patients in understanding their situation, which may lead to a change in their deceptive behavior (1). The approach to the case in the present study involved a collaboration between dermatologists, ophthalmologists and psychiatrists, ensuring a comprehensive understanding of the patient's condition. This multidisciplinary approach allowed for a thorough examination of both the dermatological and psychological aspects of the case, contributing to a more holistic diagnosis and management plan. In addition, the successful resolution of the symptoms of the patient through the identification of the external cause (makeup) and subsequent cleansing with alcohol highlights the effectiveness of therapeutic intervention. Additionally, emphasis on patient education, reassurance and ongoing care played a crucial role in achieving positive outcomes, demonstrating a patient-centered approach.

As regards treatment, factitious disorder treatment imposed on self often involves a combination of psychotherapy and, in some cases, pharmacotherapy. However, it should be noted that individuals with this disorder can be challenging to treat, as they may be resistant to acknowledging the underlying psychological issues. Psychotherapy, including individual counseling, such as cognitive-behavioral therapy or psychodynamic therapy, aims to uncover and address the root causes that drive the individual's need for attention through illness. Family therapy may also be employed to explore familial dynamics and support systems. While medications are not the primary treatment, they may be used to address co-existing conditions, such as depression or anxiety, under the management of a psychiatrist or mental health professional. In severe cases, hospitalization may be necessary when the actions of an individual pose a significant risk to their health; however, this should be approached cautiously due to the potential persistence of healthcare-seeking behaviors even in a hospital setting. Building a therapeutic alliance is crucial, given the difficulty individuals with factitious disorder may have in acknowledging their psychological distress. Since treatment needs to be individualized, a comprehensive assessment by mental health professionals is essential to formulate an appropriate and effective treatment plan (16). In the case described herein, the client and her father declined engagement in any of the therapeutic options mentioned above.

The primary limitation of the present study is its reliance on a single case, which may limit the generalizability of findings to a broader population. While the rarity of dermatitis simulata poses challenges for obtaining a large sample, future research with more cases could strengthen the external validity of our observations.

Another limitation is that despite that psychiatric evaluation, though essential, is inherently subjective, and different evaluators may interpret findings differently. Recognizing this subjectivity is crucial for understanding the limitations of psychiatric assessments and emphasizing the need for standardized protocols to enhance reliability in future cases.

In conclusion, Munchausen syndrome is a chronic and severe factitious disease characterized by the fabrication of dramatic and untruthful stories of illness. While neurological and abdominal complaints are commonly reported, dermatological manifestations are rare.

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Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Authors' contributions

RSA was the main contributor to the conception of the study. FHK was involved in the literature search and designed the study. RSA and BAA participated in reviewing the literature, in preparing and drafting the manuscript, and obtained medical images. YNA, SOS, SMA, JIH, KFH, HSM and SFA critically revised the manuscript, were involved in analyzing the patient's data and advised on patient treatment. All authors contributed equally to the manuscript, and have read and approved the final version of the manuscript. FHK and BAA confirm the authenticity of all the raw data.

Ethics approval and consent to participate

Written informed consent was obtained from the patient for her participation in the present study.

Patient consent for publication

Written informed consent was obtained from the patient for the publication of the present case report and any accompanying images.

Competing interests

The authors declare that they have no competing interests.

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