Case Report

Case series of primary psychiatric skin disorders with multi-disciplinary approach

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Abstract

Background: The incidence of psychodermatologic diseases, a group of skin abnormalities associated with psychosomatic factor, are increasing recently. About 20-40% patients with skin symptoms have concurrent psychiatric problems which are often difficult to diagnose and treat. The new classification of primary psychiatric skin disorders are delusional disorders, obsessive-compulsive and related disorders, and factitious disorders. This classification could be used for effective treatment in each patient which involves multi-disciplinary approach, including dermatology, psychiatry and other discipline if necessary.

Case Illustration: The first case was a 39-year-old unmarried female, with anemia and dermatitis artefacta occurred as wound due to blade cuts. Patient was with schizoaffective depressive type and was not under regular treatment. The second case was a 61-year-old male referred with unresolved prurigo nodularis for the past 30 years. After in-depth assessment, there were delusional parasitosis and neurotic excoriations disorders. The third patient was a 50-year-old female admitted with recurrent ulcer on her face. She was aware that the lesions were intentionally manipulated by her own fingers when she was depressed.

Discussion: All patients were classified as primary psychiatric skin disorders with varied skin manifestations. Symptoms usually occurred when the patient was in the depression state or low compliance for the psychotropic drugs. Patients generally had poor insight and refused to be associated with psychiatric factors. Dermato-venereologists are expected to conduct early detection and treat this disease.

Conclusion: It is important to approach psychocutaneous disease in multi-disciplinary manner, especially with the psychiatrist.

Keywords: psychodermatologic, dermatitis artefacta, neurotic excoriations, delusion of parasitosis

Background

More than one third, or around 20-40% of patients with skin complaints have psychological or psychiatric problems, and most patients have low grade of insight.1-2 The new classification of psychodermatology primary psychiatric skin disorders are disorders are; (1) psychophysiology skin disorders, (2) primary psychiatric skin disorders, (3) secondary psychiatric disorders, and (4) cutaneous sensory disorders.2 This classification may become a guide for effective treatment for each patient, involving dermatology, psychiatry, and other disciplines if required.

Classifications of primary psychiatric skin disorders consist of three categories, which are delusional disorders, obsessive-compulsive and related disorders, and factitious disorders. Delusional disorders divided into two categories: delusions of parasitosis and Morgellons disease. Delusions of parasitosis is a delusional disorder manifesting as the patients believe their skin is infected by parasites. Meanwhile, Morgellons disease is a variant of delusions of parasitosis, characterized by a fixed belief that there are fibers or solid material extruding from the skin.2

The second group is obsessive-compulsive and related disorders, which divided into body
dysmorphic disorder, trichotillomania, excoriations disorders, and other body-focused repetitive behavior disorders. Neurotic excoriations is a disorders characterized by self-induced cutaneous lesions because of uncontrollable impulse to excessively pick, rub, or scratch the skin. Previously, patients may have normal skin or already have lesions or skin diseases which may be triggered or aggravated by emotional stress or poor interpersonal relations. Patients may openly acknowledge that lesions are self induced. One of the lesions is prurigo nodularis like. Prurigo nodularis is a chronic disease marked by a hyperkeratotic node that are felt itchy, especially in the extensor extremity areas. Although the disease’s etiology is still unclear, the itch mainly emerges during tense emotions. This disease is categorized as an atypical nodular form ofcircumscribed neurodermatitis.

The third group, factitious disorder is a group of syndromes marked by skin, hair, or nails diseases which are self-inflicted, called dermatitis artefacta. Secondary skin findings are abnormal lacerations, excoriations, ulcerations, scarring, and other injuries in reachable area of the body.

Most patients who first visit a dermatologist, usually possess low grade of insight and generally refuses to be linked to psychiatric problems. Therefore, with this paper, it is expected that dermatologists are able to recognize the manifestations of psychodermatologic diseases and the bases of their treatment. Mohandas et al reported that around 93% patients were in remission and cured after combined treatment by multidisciplinary psychodermatology team, therefore teamwork from multiple disciplines, especially psychiatry is required in order to treat this disease.

In this paper, three cases with primary psychiatric skin disorders in Department of Dermatology and Venereology, Faculty of Medicine Universitas Indonesia - Dr. Cipto Mangunkusumo General Hospital are reported.

Case Illustration

The first case was a 39-year-old female, unmarried, who visited the Emergency Room (ER) of Dr. Cipto Mangunkusumo General Hospital with complaints of increasing weakness in the past 3 days prior to admission and a wound in her right leg that wouldn’t heal starting 1 year ago (figure 1). After a laboratory blood test, a hemoglobin level of 1.95 g/dl was obtained. The patient was diagnosed with severe anemia and referred to the Department of Dermatology and Venereology for wounds, discolorations, and red-black nodules in her head, arms, and legs. From indirect history-taking and psychiatric consultation, the patient was known to have a schizoaffective depressive type, and didn’t routinely visit her doctor for evaluation. The wound in her right leg was obtained in the last year, according to the patient the wound was from falling. The patient’s mother said that the wound was from self-inflicted cuts with a razor, and when the wound started to close, it would be repeatedly cut, and thus, it didn’t heal and never received treatment. In addition to that, nodules in the patient’s arms and legs, according to the patient’s mother, were from frequent manipulation by the patient by picking her arms and legs until they were chafed and bled. When questioned about the reason for the manipulation, the patient said it was because she felt itchy as seen in figure 2.

The result obtained from physical examination on the first day in the ER, was that the patient in general seemed moderately ill, and appeared weak. Vital signs were within normal limits, pale conjunctiva, abdomen bulging, positive shifting dullness, and edema on lower extremities. For her dermatological state, the forehead, scalp, medial side of upper arms areas had hypotrophic to atrophic scars, multiple, in linear form, some irregular, in nummular to placate sizes. On the bilateral 1/3 upper-lower arms regions there were papules-nodules with hyperpigmentation, hyperkeratotic, multiple, discrete, circumscribed partly diffused, erosion and excoriation with black crusts, and eutrophic scars. On the right lower extremity region there was a solitary ulcer, irregularly shaped, size 7x5x0.5 cm, not hollow, granulation tissue was present at the base, the borders weren’t raised, no odors, and tenderness was present. The patient was diagnosed with severe anemia, schizoaffective depressive type, suspected nephritic syndrome, dermatitis artefacta, and neurotic-excoriations disorders.

We treated the wound with topical antibiotic and modern dressing, and emollient for neurotic-excoriations lesions. After her discharge six months ago, the patient hasn’t turned up at Dr. Cipto Mangunkusumo General Hospital for follow-up.
Figure 1. First patient with dermatitis artefacta (lesion shaped as several linear lines)
Figure 2. First patient with neurotic-excoriations disorders
The second case was a 61-year-old male who was referred by a dermatologist with prurigo nodularis that wouldn’t heal for 30 years as in figure 3. The patient complained of itchy nodules on the back of his hands since the previous 40 years. The patient often felt there were bugs or worms which crawled on his scalp since 2004 after he retired from his job. This made the patient frequently scratched his head until they were chafed or bled.

The complaints mainly appeared during times when the patient was stressed, felt hopeless and useless because he wasn’t working anymore. Previously the patient experienced psychiatric disorder since he was 30 years old, he was often alone, blank faced, and acted weird. The patient’s supervisor once suggested to him to seek treatment to a psychiatrist, but he declined because he felt he has no psychiatric problem.

The patient has sought treatment to many doctors, both general practitioners and dermatologists. He was given ointments and injections on the nodules, but the patient felt there was no improvement on his condition, so he asked to be referred to Dr. Cipto Mangunkusumo General Hospital. From physical examination, his general state and vital signs were stable. For his dermatological state, there were erythematous papules-nodules on both dorsum manus regions, some with hyperpigmentation and hypertrophic scars, multiple discreet, lenticular, circumscribed, some with erosions and excoriations with red-black crusts on top. On his scalp regions, there were multiple erosions and excoriations, discrete, some confluent, lenticular, circumscribed, with red-black crusts on top. For this patient, the diagnosis was determined to be delusions of parasitosis and neurotic-excoriations, in the form of lesions like prurigo nodularis. The patient agreed to undergo psychiatric consultation, the diagnosis was determined to be severe depression with psychotic traits and narcissistic personality traits.

The patient was put on antipsychotic, antidepressant, and supportive psychotherapy. The skin lesions treated with emollient, potent topical corticostreroid and intralelional corticosteroid weekly. On follow up 2 weeks later, delusions of parasitosis appeared less frequently, and his habits of manipulating the prurigo lesions were subsided.

Figure 3. Second patient with neurotic-excoriations disorders (prurigo nodularis lesions)
The third case was a 50-year-old female with complaints of recurrent wounds on her face. Six months before consulting a dermatologist, the patient complained having acne on her chin, and the patient often pinched and picked the acne, which resulted in her chin and a corner of her mouth to become ulcerated, which according to the patient didn’t hurt. The complaint emerged when she experienced trouble with her husband. From physical examination, her general state and vital signs were within normal limits. On further examination, on the corner of her mouth there was a lenticular sized ulcer, solitary, with raised border, irregularly shaped, and pus was present. On her chin area, there were erythematous hypertrophic scars below her lips, with irregularly shaped. The diagnosis was determined to be dermatitis artefacta in the form of ulcer and hypertrophic scar tissue (figure 5). The patient refused to be referred to a psychiatrist. The lesions treated with low level light laser, wound care and intralesional corticosteroid. The wound had improved, but then a new wound appeared because the patient was depressed again.
Table 1. Resume of the case series

| Case | Sex / age (years) / marital status | Psychosocial / psychiatric disorder/ other diagnosis | Type of psychocutaneous disease and cutaneous lesion | Multi-disciplinary approach | Therapy | Follow up |
|------|-----------------------------------|-----------------------------------------------------|----------------------------------------------------|-----------------------------|---------|-----------|
| 1.   | F, 39, unmarried                   | Left by her boyfriend and father died / schizoaffective depressive / anemia gravis, and nephritic syndrome | • Dermatitis artefacta → linear ulcer, scars due to razor cuts<br>• Neurotic excoriations → prurigo-like lesions | • Dermatologist<br>• Internist<br>• Psychiatrist | • Wound care<br>• Topical antibiotic<br>• Emollient.<br>• Risperidone 2x1 mg<br>• Ativan 2x0.25 mg | Loss to follow up |
| 2.   | M, 61, married                     | Work problems / severe depression with psychotic symptoms | • Delusion of parasitosis → erosions, excoriations<br>• Neurotic-excoriations disorders → prurigo nodularis lesions | • Dermatologist<br>• Psychiatrist (not taking psychotropic medicine regularly) | • Topical corticosteroid, emollient<br>• Risperidone 2x 2 mg<br>• Sertraline 1x50 mg<br>• Supportive psychotherapy | Improve only when taking psychotropic medicine |
| 3.   | F, 50, married                     | Problems with husband / depression                   | • Dermatitis artefacta → ulcers, hypertrophic scars | • Dermatologist (refused to go to psychiatrist) | • Diode laser<br>• Wound care<br>• Intrallesional corticosteroid | New wound |

F: Female., M: Male
Discussion

The three patients were diagnosed with primary psychiatric skin disorders in the form of delusions of parasitosis, dermatitis artefacta and neurotic-excoriations disorders, based on anamnesis and physical examination. Delusions are false beliefs, firm in nature, commonly found in midlife to elderly age groups who experienced social isolation. In delusions of parasitosis, the patient believes that there are parasites on their skin. Patients often collect proof in containers in the form of clothing lint, crusts, or other debris to convince others, especially doctors that there is a parasite infection in their body (known as matchbox sign).²

Dermatitis artefacta are categorized as factitious disorders which are a group of syndromes marked by self-inflicted skin diseases. Patients deliberately create symptoms and signs of a disease to pose as a patient, in order to obtain primary and secondary gain (emotional and psychological benefits obtained by sick people). In dermatitis artefacta, patients often deny involvement on existing skin lesions, such as the wound lesion on the first patient. The wound on her leg was claimed to be caused by falling. Meanwhile, when an indirect anamnesis was performed to the patient’s mother, it was said to be caused by the patient cutting herself. When the wound was starting to heal, the patient would cut it again.

On neurotic excoriations, the patient admits their involvement in creating the skin lesion. The first and second patient admitted that the reason for scratching was an itchy feeling and wanting to get the liquid below their skin out. Meanwhile, the third patient admitted that because she wanted to pinch her acne, which was done continually until it caused a deep ulcer to form on the corner of her lip. As stated by Wong et al that psychocutaneous diseases can be found in patients with history of lesions that never heal.⁸ Nodules and wounds of these three patients never heal for years because of repeated acts of manipulation by the patients. A supporting factor is the locations of lesions which are easily reached by the patient.

Patient with skin picking often stated complaint of itch and they were triggered by psychological stressors. Repeated excoriations may trigger a cycle of itch-scratch and results in a thickened lesion, often in the form of scar tissue and post inflammatory hyperpigmentation. As dermatologists, we must evaluate the cause of itch in patients and exclude the possibility of internal diseases such as malignancy (most often lymphoma), disorders of liver and renal functions, HIV infection, and psychiatric diseases, especially depression and anxiety disorders and also evaluate the skin manifestation.⁵

Manifestations of psychocutaneous diseases generally appear as skin problems. Patient often approaches dermatologists instead of psychiatrists.⁶⁷ Dermatologists are expected to promptly and correctly diagnose this group of psychocutaneous diseases, and understand their correct treatments. Several studies reported that some of these psychocutaneous cases were wrongly diagnosed, and treated as skin diseases for a long period of time and didn’t show improvements.⁸⁰

To treat patients with primary psychiatric disorders, dermatologists must work together with colleagues from psychiatry and other disciplines if required. These diseases are classified as chronic illness, remission and therapy are difficult, although they may have good recovery rates with pharmacological therapy. The most important aspect is to maintain patient involvement and avoid direct confrontation. Dermatologists must listen empathetically, express their concern and perform examination on the skin and samples to build positive doctor-patient relationship. During early consultations, some patients may refuse to be referred to a psychiatrist, therefore the dermatologist should improve the patient’s trust before suggesting a psychiatric evaluation. After several visits, the dermatologist may declare that the parasite wasn’t found, and we understand that the patient is very upset and psychotropic medications are needed.² On many cases, psychotropic medications must be started by the dermatologist and when the response isn’t satisfactory or if the patient consented, may be referred to a psychiatrist.⁹ A guided therapy of psychiatric skin diseases in patients may be achieved with antipsychotic and antidepressant medications. Antipsychotics which may be prescribed by a dermatologist are risperidone 2x1 mg or aripiprazole 1x5 mg. Antidepressants are useful in reducing impulsivity to manipulate the skin, sertraline 1x50 mg or fluoxetine 1x20 mg are the ones which may be prescribed.⁴¹¹

For neurotic-excoriations skin lesions, especially skin picking or prurigo lesions, the main treatment is to stop the itch-scratch cycle which is the primary cause of the disorder. The
patient's nails must be closely cut and they must try to avoid scratching. Treatment of choice of prurigo lesions are emollient, potent topical steroids, intralesional steroids, capsaicin, calcipotriene, cryotherapy, topical tacrolimus may be used as steroid-sparing agent. Sedative antihistamine hydroxyzine, tricyclic antidepressant such as doxepin is for nightly use. Thalidomide, cyclosporine, broad and narrow-band UVB, or excimer light monochromatic 308 nm are reported to be effective in several case reports.11

The three patients have attempted several choices of treatment, but they weren’t effective because the underlying diseases haven’t been treated properly, therefore the patients keep manipulating the lesions. The first and second patient didn’t routinely take psychiatric medications because they claimed they have no psychiatric disorder and lack of family involvement. The third patient refused to have a psychiatric consultation. Therefore, in psychocutaneous cases, more intensive education, including the role of patient families to control psychiatric medications consumption, not manipulating lesions, and regular use of topical medications are needed.

Conclusion

In this case series, all patients have been performed several therapies however the outcome was not satisfactory because the underlying disease has not been well treated. Especially the third patient who refused to be referred to a psychiatrist. Conclusively, dermatologist should work in a multidisciplinary team.

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