Journal of Mind and Medical Sciences

Volume 2 | Issue 1 Article 10

2015

Pathological Skin Picking: Case Presentation and Review of the Literature

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JMMS 2015, 2(1): 78- 88. **Case report**

Pathological skin picking: case presentation and review of the literature

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Running title: Pathological skin picking
Keywords: skin picking, obsessive compulsive disorder, factitious disorder

www.jmms.ro 2015, Vol. II (issue 1): 78- 88.
Date of submission: 2014-10-09; **Date of acceptance**: 2014-11-28

Abstract

Pathological skin picking is a condition in which patients induce skin lesions through repetitive, compulsive excoriations of normal skin or skin with minor surface irregularities and they admit their role in the production of the lesions, but are unable to stop their behavior. Psychiatric comorbidities most often associated with skin picking include obsessive-compulsive disorder (OCD), anxiety disorders, mood disorders, body dysmorphic disorders, trichotillomania and compulsive-buying disorder. We report the case of a 17 year old female patient who addressed the dermatology department of our hospital with an eruption consisting of erythematous papules and plaques. The local examination revealed several clues of paramount importance in drawing the final conclusion and the psychiatric examination helped establish the diagnosis of pathological skin picking in a patient with obsessive-compulsive disorder.

Introduction

Skin picking is a condition in which patients induce skin lesions through repetitive, compulsive excoriations of normal skin or skin with minor surface irregularities. The patients admit their role in the production of their lesions but are unable to stop their behavior (1). It affects 2% of the patients attending dermatology clinics and has a prevalence of 9% among patients with pruritus. It predominantly affects women in their teens to late 30s (2, 3). The lesions can evolve from a pre-existing urticarial papule or acneiform lesion or it may be created de novo. Clinical findings include multiple excoriations with a variety of shapes (linear/angular, circular, oval) in various stages of evolution with post-inflammatory pigmentation and frequent scarring, usually located on easy to reach areas such as extensor surfaces of the extremities, upper back and face. The lesions may range in size from a few millimeters to several centimeters. In extreme variants of the affliction patients can even develop prurigo nodularis which is characterized by extremely pruritic nodules preferentially located on the extremities (1, 4).

Obsessive compulsive disorder is a chronic debilitating syndrome classified as an anxiety disorder consisting of recurrent obsessions such as intrusive thoughts which contribute to expanding anxiety and repetitive compulsions (behavior performed in an effort to reduce anxiety) (5).

Case report

We report the case of a 17 year old female Caucasian patient from the urban area who addresses the dermatology department of our hospital for multiple pruritic papules and plaques which had occurred approximately five days before presentation, after depilation. The patient asserts that the lesions were

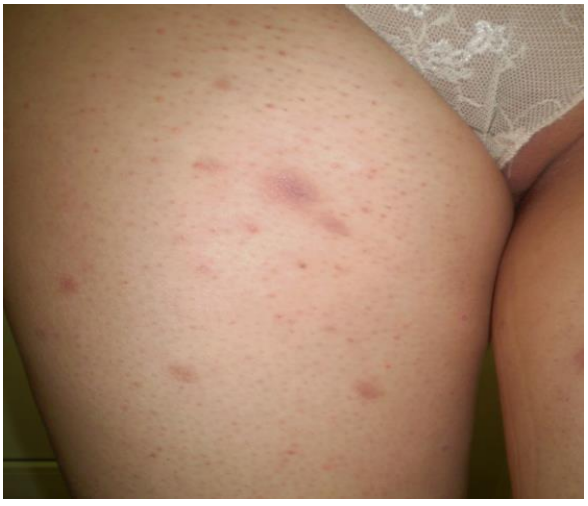

Fig. 1. Erythematous papules of 2 mm to 1 cm in diameter on the thighs

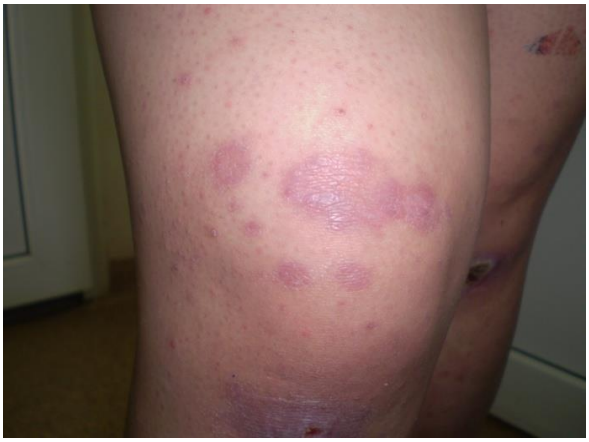

Fig. 2 Erythematous, well demarcated papules and plaques on the thighs as well as erythematous plaques covered by crusts on the knees.

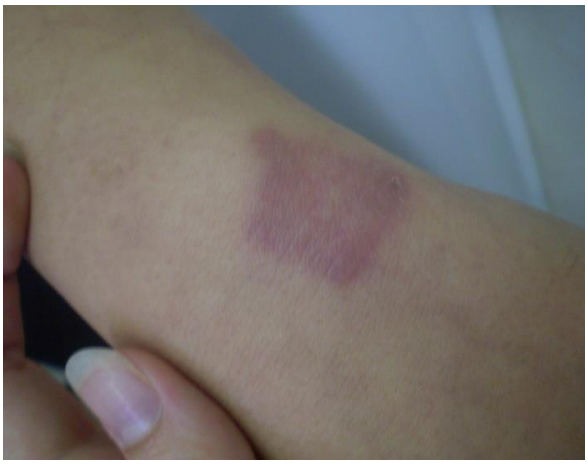

Fig. 3 Very well demarcated, almost rectangular erythematous plaque on the left forearm.

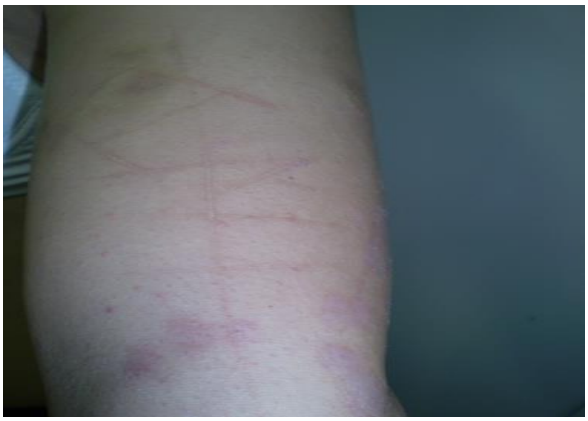

Fig. 4 Multiple linear hyperpigmented scars as well as erythematous papules and plaques on the anterior aspect of the left forearm

extremely pruritic and she admits having scratched them. Her family history is unremarkable. The local examination revealed an eruption consisting of erythematous papules and plaques of 2 mm to 3 cm in diameter located on the thighs, arms and forearms. Most lesions are well demarcated and some of them have oval and angular shapes (*Fig. 1, 2, 3*). She also presents erythematous lesions covered by hematic crusts in both knees, which, according to the patient, had occurred after an accidental fall, and several bruises on the arms (*Fig. 2*). On the anterior anterior part of the left arm she has several linear scars which had admittedly occurred after the patient had cut herself with a razor blade about one year before presentation (*Fig. 4*).

Laboratory findings were within normal range. The patient was recommended a psychiatric examination and was diagnosed with obsessive compulsive disorder. Based on the clinical findings and psychiatric examination the patient was diagnosed with pathological skin picking in a patient with obsessive compulsive disorder.

The skin lesions were treated with topical corticosteroids, antihistamines and doxepin. The

patient also received specialized psychiatric treatment with selective serotonin reuptake inhibitors (SSRI). The evolution was slowly favorable. She remains under our supervision.

Discussion

Skin picking, also known as neurotic excoriations, psychogenic excoriations, pathological skin picking, self-injurious skin picking or dermatillomania, is a primary psychogenic disorder belonging to the group of factitious disorders. Factitious disorders are a group of self-inflicted skin lesions that are differentiated from one another based on the degree of insight or consciousness of the patients regarding their behavior. In dermatology the lesions can be produced by mechanic injuries such as pressure, friction, occlusion, biting, cutting, thermal burns or self-inflicted infections. The current classification differentiates between four groups: dermatitis artefacta syndrome in which the patients produce signs and symptoms to satisfy a psychological need of which they are usually not consciously aware. When asked, the patients deny having any role in creating the lesion; dermatitis para-artefacta syndrome which is an impulse control disorder. Patients belonging to this group are conscious or semiconscious of manipulating their skin but are unable to control their behavior. Skin picking and trichotillomania belong to this group. Patients describe a sense of relief or pleasure after producing the lesions; malingering in which patients intentionally produce lesions to obtain material gain; special forms of factitious disorders include Gardner Diamond Syndrome, also known as psychogenic purpura or painful bruising syndrome, Münchhausen Syndrome defined by the triad factitious symptoms, pseudologia phantastica and doctor or hospital shopping and Münchhausen-by-Proxy Syndrome, in which children are hurt by their caregivers in order to establish contact with health professionals (1, 4, 5, 6).

Pathological skin picking was considered a residual diagnosis or an impulse control disorder not elsewhere classified in the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision (DSM-IV-TR), along with trichotillomania, kleptomania, pyromania, pathologic gambling or explosive disorder (2, 7). Since the disorder has been more intensely studied in the last years, it has been

proposed that the affliction should be included in the DSM-5 and studies performed on patients with skin picking disorder support the proposed diagnostic criteria for the

affliction (8). The prevalence of skin picking at a global level is unknown but studies have shown that 2% of the patients addressing dermatology clinics and 9% of the patients with pruritus suffer from this affliction. Studies have also shown high prevalence of the disease among college students (3.8%) and patients with body dysmorphic disorder (28%) (2, 3, 9, 10).

Pathological skin picking has been associated with obsessive compulsive disorders, body dysmorphic disorders, anxiety disorders and trichotillomania. Therefore, patients with body dysmorphic disorder pick their skin to improve imagined or slight imperfections of their skin while people with obsessive compulsive disorder to remove perceived dirt or other contaminants. Skin picking also occurs in 70 % of the adolescent patients with Prader-Willy syndrome, a genetic disorder also characterized by intellectual disability, compulsive behaviours, tantrums, heightened fascination, growth hormone dysregulation and hyperphagia (9, 11, 12).

Females are more often affected by the disorder and some studies even showed a female to male ratio of 7:1. The age of onset is usually between 30 and 40 years, but it has been reported in patients with ages ranging from 3 to 82 years. The duration of the disorder varies between a few months and 33 years (13, 14). In the case we are presenting the patient is a 17 year old female whose current episode of disease debuted five days before presentation. However, the presence of the linear scars secondary to the razor blade cuts suggests that the disease must have started at least one year prior to the hospital admittance.

Triggers for skin picking include stress, anxiety, boredom or anger, but also the feel of the skin due to bumps or unevenness or the look of the skin due to discoloration for example. Some studies showed that females experienced more frequent skin picking during menstruation or shortly before. Skin picking begins as an unconscious behaviour but becomes conscious in time. However, in some cases patients are not aware of their behaviour until someone else brings it to their attention. Skin picking

episodes can last from a few minutes to as long as 12 hours a day. Patients usually use their fingernails to pick their skin, but pins, tweezers, razor blades or knives may also be used. The skin resulted after the picking can be rolled in the fingers and thrown on the floor, wiped in a towel or eaten (9, 13, 15). The patients report feeling pleasure, satisfaction or gratification during the picking episode. However, after picking, they usually feel guilt, shame and dysphoria, dissatisfaction with the appearance, worries that the disorder might be discovered. Patients cover their lesions with makeup and clothes and avoid social contact. Even though patients recognise that their behaviour is harmful, they cannot stop it (9, 13, 15, 16).

In the case we are presenting the picking episode started after depilation, when, according to the patient, small, extremely pruritic papules appeared and she was unable to abstain from scratching them. She is aware that the lesions enlarged after she scratched them, but she cannot stop her behaviour because the excoriation of the lesions gives her a feeling of relief.

Patients who pick their skin often describe intense pruritus before the picking episode, but other skin sensations such as burning, warmth, dryness or pain have also been reported. Usually patients pick acne lesions, urticarial papules, scabs, scars or insect bites but some patients pick normal appearing skin. Repeated picking leads to excoriations of linear, angular, circular or oval shapes in various stages of evolution, postinflammatory hyperpigmentation and scarring. Lesions may vary from a few millimetres to several centimetres and are located in areas which can be easily reached such as the face, scalp upper back, extensor surfaces of the extremities and spare the unreachable areas. The number of lesions can vary from a few to several hundred. Lichenified lesions may also occur and in extreme cases of the disorder patients can develop prurigo nodularis lesions (1, 4, 13, 17, 18).

In the case we are reporting the patient presented an eruption consisting of erythematous papules and plaques located on the thighs, arms and forearms, most of them well demarcated and some of them with oval and angular shapes. She also presents erythematous lesions covered by hematic crusts in both

knees and several bruises on the arms. On the anterior part of the left arm she has several linear scars which had occurred after the patient cut herself with a razor blade (*Fig. 1, 2, 3, 4*).

Psychiatric comorbidities most often associated with skin picking include obsessive-compulsive disorder (OCD), anxiety disorders, mood disorders, body dysmorphic disorders, substance abuse disorders, trichotillomania and compulsive-buying disorder. Social stressors such as unemployment, financial loss and marital hardship have also been reported (17, 18, 19). Individuals with skin picking disorder often have an obsessive compulsive personality including traits like rigidity, perfectionism, judgemental and controlling behaviour. On the other hand, OCD occurs more frequently in skin picking disorder (6%- 52%) than in general population (1%- 3%) (4, 15).

In the case we are presenting, the patient was sent for a specialised psychiatric examination and was diagnosed with obsessive compulsive disorder. Several scales have been developed to assess the severity and consequences of skin picking. The Skin Picking Impact Scale (SPIS) is a self-reported instrument developed to assess the psychosocial consequences of skin picking. The Skin Picking Scale (SPS) is a self-report scale for the assessment of severity in medical and psychiatric patients with skin picking. The Skin Picking treatment scale is a clinician rated scale which assesses the intensity of urges to pick, skin picking frequency, duration of picking, control and interference of functioning (13, 20, 21).

The condition is associated with complications which can vary from localized infections and noticeable excoriations to severe life-threatening complications such as septicemia, excessive blood-loss after picking through major blood vessels, brain injury or intracranial infection (7, 13, 15, 22). Skin picking should be differentiated from normal picking. While most people pick their face or hands to a limited extent, in individuals with pathologic skin picking the behaviour is recurrent and results in noticeable skin lesions (9, 10).

The differential diagnosis should include pruritic disorders such as urticaria, uremia, hepatitis, xerosis and neoplasms, in particular lymphomas. The differential diagnosis for the underlying

psychiatric disorder should include depressive and anxiety disorders, delusions of parasitosis, dermatitis artefacta and hypochondriasis (1, 19).

The management of the disorder is complex and should include the treatment of the underlying disease (when present), the treatment of the pruritus (when present), the topical treatment of the lesions and the treatment of the psychological aspect of the disease. Antipruritic agents include topical lotions containing pramoxine or menthol and systemic antihistamines. Doxepin is useful in patients who also associate depression or anxiety. The pruritus could also improve with phototherapy. Cool compresses facilitate debridement of crusts. Intralesional corticosteroids can be used to reduce inflammation in certain lesions (1, 4). As for the psychological component of the disorders, several treatments have been proposed, with more or less beneficial results. SSRIs have proved their efficacy especially in patients with OCD. Therefore, studies show that fluoxetine shows encouraging results in the treatment of the disorder but larger controlled studies are warranted (4, 14, 23, 24). Low dose atypical antipsychotics such as olanzapine or paliperidone have been considered efficacious in a few cases of skin picking and one study showed that the association of haloperidol and fluvoxamine could also be a successful therapeutic approach (1, 2). Studies regarding the use of lamotrigine in the treatment of this affliction showed contradictory results (25, 26) as did studies regarding the use of topiramate (27). Non-pharmacological treatments such as habit reversal, behaviour therapy, internet support groups, engaging in competitive activities, contingent glove wearing have proven helpful and well tolerated (14, 28, 29).

In the case we are presenting, the patient was treated with antihistamines and doxepin to reduce the pruritus and topical corticosteroids for the skin lesions. She also received specialized psychiatric treatment with SSRIs from her psychiatrist. The evolution of the lesions was slowly favorable.

Conclusion

Skin picking is a prevalent disorder affecting 2% of the patients attending dermatology departments. Even though most of the cases are associated with scarring and disfigurement, some of the

cases have severe, sometimes life-threatening complications. Close collaboration between the dermatologist and the psychiatrist is of paramount importance in achieving favorable outcomes in the treatment of the disorder.

Disclosure

No authors involved in the production of this article have any commercial associations that might pose or create a conflict of interest with information presented herein.

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