## Psychogenic purpura

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> Adv Dermatol Allergol 2019; XXXVI (5): 643–645 DOI: https://doi.org/10.5114/ada.2018.78706

The history of psychogenic purpura dates back to the early 20th century. In 1927, the German psychiatrist Rudolf Schindler described 16 patients with skin hemorrhages [1]. Shortly thereafter in 1928, 2 other cases were described with associated hysterical personality and delusions, respectively, thus connecting the skin lesions with psychopathology [2].

Initiation of skin lesions generally follows physical trauma or surgery [3] but can be atraumatic in nature [4–7] with the common theme being severe emotional disturbance.

Painful bruising syndrome is characterized by burning, itching, and a stinging sensation or pain, followed by cutaneous induration a few hours later. The patients bruise easily. A recurrent type of eruptions is characterized by extremely painful and tender ill-defined ecchymotic masses on the extremities and sometimes on the face or trunk. Subsequently, painful edematous pink or red plaques of variable sizes become visible in a few hours and resolve within 5 to 8 days.

While the extremities and trunk are common sites, new lesions can occur anywhere on the body [8–10].

Some authors have suggested associations with a variety of hematologic conditions including thrombocytosis, defective thrombocyte aggregation, increases in activated partial thromboplastin time, idiopathic thrombocytopenic purpura, and circulating fibrinolytic factors [11–14], while others consider it to be of psychosomatic or factitious origin as the patients frequently present particular psychological manifestations, hence the name of psychological purpura [9, 13].

Young women bruise easily despite normal coagulation profiles and normal platelet count. Hersle and Mobacken have found some 31 patients reported in the literature.

Conversion symptoms, hysterical traits, and dissociative reactions may accompany such hemorrhagic symptoms [11, 12].

A 20-year-old female presented with a history of recurrent painful bruise-like marks on the upper extremities, face and body for the preceding 6 years. The disseminated lesions on the skin were light brown to yellow in color, had irregular shapes, varied in sizes from a few millimeters to a few centimeters and were clearly isolated from the healthy skin.

The lesions used to appear abruptly and were heralded by a tingling or burning sensation, followed by a few areas of reddish discoloration progressing to ecchymoses within a couple of days. Lesions occurred at intervals of 1–2 months.

After 2 years, the same lesions started to appear again not only within the same area but also on the face, lips and eyelids. There was no itching and the lesions improved spontaneously within a week or two, imparting a bluish discoloration initially that gradually subsided without leaving any trace. She was in good health. There was no preceding or concomitant history of injury, drug intake, condition, external bleeding, arthralgia, respiratory infection, central nervous system, or gastrointestinal symptoms. No family history of a similar illness was present. No other family members had similar lesions or any other history of skin disease.

The examination revealed a few slightly tender, bluish-red, non-edematous, and ecchymotic patches of 2–5 cm in diameter on the face, body and upper extremities. Around the mucouses, hair or nails there were no lesions visible. The examination with the Wood lamp yielded negative results (Figures 1, 2). The patient was subsequently referred for psychiatric evaluation.

The psychiatric profile of the patient revealed that the patient came from a poor socio-economic background and since her childhood, she has poorly expressed her feelings or emotions. Coinciding changes included low self-esteem, academic decline, poor interpersonal relationships, and heightened feelings of stress over the past year. At the time of presentation, she was excessive-

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Received: 14.07.2018, accepted: 22.08.2018.

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**Figure 1.** Multiple bluish-red, non-edematous, and ecchymotic patches of 2–5 cm in diameter on the body

ly worried about her present cutaneous problem. There was no family history of any psychiatric illness.

Laboratory data: Transaminase levels, total bilirubin, alkaline phosphatase levels, rheumatic factors, and immunologic studies were normal. So were coagulation profiles and platelet count though with increased megathrombocytes.

Histopathology: 1) First biopsy during first hospitalization. The skin has a concentrated pigment on its basal area. 2) Second biopsy after 2 years during second hospitalization.

The biopsy results: pigment accumulation in the dermis. Diagnosis: psychogenic purpura.

Treatment: Initially local therapy with a corticosteroid cream and hepathrombin cream 2–3×/day (1–2 weeks) was used. Later cyproheptadine (Periactin of 4 mg)  $2 \times 1$  was used as antihistamines and also vitamin C  $2 \times 1$  tablets.

The patient has had a recurrence, and after consulting the literature she has started taking antidepressants. Lorazepam as an antidepressant belongs to a class of medicines known as benzodiazepines, which were used in doses of 2–3 mg oral tablets once in 8–12 h (for 6 consecutive months), but only during the manifestation of patches (3–5 days). Visible improvements were noted and this was the reason for the decision on psychogenic etiology.

The follow-up after 3 and 6 months showed complete resolution of symptoms. We learned that after 1 year the patient got married.

Psychogenic purpura, first described by Gardner-Diamond and named by them as autoerythrocyte sensitization (1955) [1, 4], is a rare syndrome characterized by spontaneous, painful inflammatory ecchymoses. Repeated crops of bizarre, tender, ill-defined ecchymotic lesions most commonly located on the arms and legs and bleeding from other sites characterize the condition [2, 5]. Because of the evidence that the occurrence of this syndrome is related to psychological factors, Ratnoff and Agle (1968) suggested that the condition be renamed



**Figure 2.** Multiple bluish-red, non-edematous, and ecchymotic patches of 2–5 cm in diameter on the upper extremities

"psychogenic purpura". However, the precise mechanism of this syndrome is not well understood. The disease has an intermittent and irregular course with variable treatment responsiveness. The overall prognosis is quite good. However, in many patients, relapses and remissions [6] are common occurrences and may last for several years.

There is no specific treatment for psychogenic purpura. Symptomatic therapy is provided for severe general symptoms. Several approaches including antihistamines, corticosteroids, antidepressants, hormones, and vitamins have been used with variable success. Medications such as busulfan [12], promethazine [13] and numerous others including antidepressants have been used to treat Gardner-Diamond syndrome. Treatment consists of psychiatric therapy, which is most effective when instituted early in the course of the disease; so, early diagnosis will not only minimize the cost of the medical evaluation, but will also be beneficial for the patient [14].

Therefore, this is a very rare syndrome and the course of symptoms, treatment and results of the presented case are similar to other presented cases.

## Conflict of interest

The authors declare no conflict of interest.

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