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# A cry for help, do not omit the signs. Dermatitis artefacta – psychiatric problems in dermatological diseases (a review of 5 cases)

#### **Authors' Contribution:**

- A Study Design
- B Data Collection
- C Statistical Analysis
- D Data Interpretation
- **E** Manuscript Preparation
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# **Summary**

### **Background:**

Dermatitis artefacta (DA) is a dermatologicopsychiatric illness that is a conscious self-infliction of lesions to accessible regions of the body. The lesions usually do not resemble those of any know skin disease and there are no specific diagnostic tests to recognize them. This makes dermatitis artefacta a very slow, challenging and expensive disease to diagnose.

# **Case Report:**

We present 5 different clinical cases of dermatitis artefacta treated in the Department of Dermatology, Venereology and Allergology, Medical University of Gdańsk in 2011. Detailed anamnesis and physical examination were performed at the day of admission. All patients had biochemical and hematological blood tests, skin biopsies and swabs for bacteriological examination, and photographs were taken. Psychiatric consultation was recommended in all cases.

Clinical symptoms before diagnosis lasted from 1 to 10 years. The female-to-male ratio is 1:0.7, with age range of 57–62 years. Of our patients, only 2 refused a psychiatric consultation. Three out of 5 patients denied self-mutilation (2 of those 3 patients finally admitted to self-manipulations). Lesions were usually within the reach of the dominant hand. Two patients have other personality disorders. In 4/5 cases visible improvement after treatment with occlusive dressings were observed.

#### **Conclusions:**

We discuss and attempt to depict issues associated with collaboration between dermatologists and psychiatrists, reasons for poor recognition of the disease, very long diagnosis and high costs. To conclude, we found that close collaboration between dermatologists and psychiatrists is important in diagnosing and treating DA patients.

#### key words:

dermatitis artefacta • diagnosis • psychodermatology

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#### **BACKGROUND**

Psychiatric diseases in dermatology are becoming increasingly common. Dermatitis artefacta (DA) is one example of such a disease. It accounts for 0.05–0.5% [1] of all dermatological consultations.

The diagnostic code of DA in the ICD-10-CM is L98.1 and is defined as the intentional production or feigning of symptoms or disabilities, either physical or psychological. DA belongs to the spectrum of factitious disorders, where self-inflicted skin lesions include the creation of physical or psychiatric symptoms in oneself or other reference persons [2].

The self-inflicted nature of the lesions is, however, not obvious, which often leads to the repetition of diagnostic tests that invariably show no pathology.

Mechanical injuries caused by pressure, friction, occlusion, biting, cutting, stabbing, thermal burns or self-inflicted infections with wound-healing impairment, abscesses, mutilations or damage by acids and other substances toxic to the skin are common in dermatology. The current classification differentiates between 4 groups: 1) Dermatitis artefacta syndrome – in the narrower sense as unconscious/dissociated self-injury; 2) Dermatitis para artefacta syndrome – disorders of impulse control, often as manipulation of an existing specific dermatosis (often semi-conscious, admitted self-injury); 3) Malingering – consciously simulated injuries and diseases to obtain material gain; and 4) Special forms – such as the Gardner Diamond Syndrome, Münchhausen Syndrome and Münchhause- by-Proxy Syndrome [3].

The diagnostic procedures in very "expensive" patients can reach an estimated cost per patient of 64 500 EUR [4]. Another consequence is that DA may remain undiagnosed for a long time due to lack of awareness.

Why do individuals intentionally inflict damage upon themselves? The most probable explanation is multifactorial and takes into account genetics, psychosocial factors and personal or family history of psychiatric illness [5].

#### **CASE REPORT**

This article presents 5 cases of DA treated in the Department of Dermatology, Venereology and Allergology, Medical University of Gdansk in 2011. Detailed anamnesis and physical examination were performed on the day of admission. All patients had biochemical and hematological blood tests, skin biopsies and swabs for bacteriological examination, and photographs were taken. Psychiatric consultation was recommended in all cases.

All patients signed informed consent (due to anamnesis, physical examination, diagnostic procedures as well as photographs) at the day of admission to the Department of Dermatology.

#### Case 1

A 62-year-old Caucasian male was hospitalized multiple times in different clinics for approximately 10 years. He underwent numerous diagnostic procedures, such as head CT, abdominal ultrasonography, 8 skin biopsies and multiple microbiological tests. The laboratory examinations did not reveal any abnormalities and diagnosis was not established.

During the 10-year course he was treated with topical antibiotics (erythromycin, clindamycin, fucidic acid, and mupirocin), oral antibiotics (ciprofloxacin, amoxicillin with clavulanic acid, clindamycin, tetracycline and rifampicin), oral retinoids and hyperbaric oxygen therapy.

On admission widespread serous ulcerations and atrophic scars covering his cheeks were observed. During the anamnesis he stated that the lesions were extremely painful. According to the patient, the pain was strong enough to interfere with falling asleep. However, daily ingestion of ibuprofen 200 mg (usually 3 tablets) ameliorated the pain. He denied any manipulation of the lesions, such as scratching or squeezing.

The patient provided a very detailed written history of the disease, which he wrote himself. In his notes he accused doctors of being ignorant and lacking competence. Perceptive nurses in the ward noticed that he frequently examined his face using a pocket mirror.

DA was suspected and confirmed by a psychiatrist. When speaking with the psychiatrist the patient confessed to provoking the lesions by scratching them with his nails or a needle. The patient stated that doing so provided relief from the painful nodules on his face, allowing him to fall asleep. He described the painful nodules as containing long, thick white hairs. The DA was treated with venflaxine (150 mg/day) and followed by a silver nitrate cream under occlusion. The treatment resulted in resolution of the skin lesions. This case has previously been published by Barańska-Rybak W. MD, PhD in Psychiatria Danubina [6].

#### Case 2

A 57-year-old Caucasian woman was admitted to our clinic with a 2 cm ulceration on the right side of her neck with a visible scar above the ulceration (Figure 1). The patient reported that the ulceration originally presented as a small nodule. She was troubled by this for 2 years and was treated multiple times with topical antibiotics and cryotherapy. All histopathological examinations and laboratory tests were normal. Eventually the patient admitted to manipulating the lesion with tweezers. The problem began when her husband was diagnosed with gastric cancer and eventually died, further accelerating her disease. She was consulted by a psychiatrist and was diagnosed with depression comorbid with associated DA. The patient began treatment with 30 mg mirtazapine daily. After release from our Department the patient has not returned for further consultation.

#### Case 3

A 62-year-old Caucasian woman was admitted to our department with unilateral erosions on the right hand – her non-dominant hand (Figure 2), which had been troubling her for more than a year. She denied any physical or chemical damage to her skin. The histopathological, skin patch and laboratory tests were normal.



**Figure 1.** Ulceration of the neck with visible scar above (Author — Wioletta Barańska-Rybak).



**Figure 2.** Erosions on the right hand the day of admission (Author – Wioletta Barańska-Rybak).

After treatment with occlusive dressings, she recovered completely. The patient refused psychiatric consultation.

#### Case 4

A 62-year-old Caucasian male was admitted to our department with a 4-year history of a lesion located on the second digit of his right foot that was not healing (Figure 3A). A series of laboratory and diagnostic tests (1 X-ray, 1 MRI and 3 biopsies from his toe) did not reveal any abnormalities and no diagnosis was established. The patient eventually admitted to self-inflicting the excoriation, explaining that the initial lesion was a wart that he tried to remove using nails and tweezers. Prior his admittance, the patient was consulted by a surgeon who suggested amputation of the affected digit. He was also initially treated with topical antibiotics, which did not improve his condition. Once consulted at our department, the patient was diagnosed with DA.

Treatment was intensified using oral clindamycin 300 mg every 8 hours and occlusive dressings with topical antiseptics (0.1% octenidine dihydrochloride) twice daily. After 60







**Figure 3.** Erosions and ulceration on the second digit (**A**) at day of the admission (**B**) 30 days after admission (**C**) at the day of discharge from hospital, 60 days after treatment (Author – Wioletta Barańska-Rybak).

days there was a considerable improvement (Figure 3B, C). The results were satisfactory; however, the patient refused psychiatric consultation.

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**Figure 4.** Erosions and scars on the back (Author — Wioletta Barańska-Rybak).

#### Case 5

This 54-year-old Caucasian woman was convinced that her skin was infested by skin parasites (Figure 4). The patient had frequently visited different dermatologists for 5 years without any improvement. During this 5-year period the patient underwent an impressive number of diagnostic examinations - MRI of the head, 23 swabs from the skin lesions for microbiological examination, and 6 skin biopsies - without finding any abnormalities. Additionally, she was incorrectly diagnosed with dermatitis herpetiformis, prurigo nodularis and scabies, for which she received treatment with topical steroids, antibiotics, permethrin and emollients. No improvement was achieved, to the patient's visible dismay. During anamnesis she provided her own detailed documentation of the disease and the "parasites" that she had removed from her skin (Figure 5). The supposed "parasites" were carefully examined microscopically, but no parasites were discovered.

In addition to the presented skin lesions, the patient also suffered from arterial hypertension, chronic coronary heart disease and hypothyroidism.

Eventually the patient agreed to a psychiatric consultation. She was diagnosed with delusions of parasitosis, but refused treatment with perazine recommended by psychiatrist.

#### **DISCUSSION**

According to the relevant literature the lesions are morphologically bizarre, often geometric in outline, destructive, and reportedly of sudden, mysterious yet fully formed appearance [7]. We observed that the lesions were usually within reach of the dominant hand (cheeks, neck, foot and the right hand in a left-handed patient). The patient often gives an incomplete anamnesis and is unable to accurately describe how the lesions began or developed [8].

Three out of our 5 patients denied self-mutilation (2 of those 3 patients finally admitted to self-manipulations), which, according to Koblenzer [9], is typical for DA. Patients are also reluctant to speak with psychiatrists [9]. In our sample, 2 patients refused psychiatric consultation, and the remaining



Figure 5. "Proof" brought by patient (Author — Wioletta Barańska-Rybak).

3 patients agreed to a psychiatric consultation, but this required much persuasion.

DA is a very challenging disease, but a cure is possible. Patients should be seen at frequent intervals to establish a good relationship with the doctor. This is important, as many patients are often lost to follow-up. It is also important to prevent unnecessary treatments and hospitalizations in different clinics. In all 5 cases the patients had received unnecessary treatments for extended periods of time. If the DA patient is not satisfied with the results of treatment or their expectations are not met, the patient will find a new physician, resulting in a new expensive, time-consuming and fruitless cycle of diagnostic tests and treatments. Such a situation was exemplified by Case 1, where the patient accused his previous doctors of ignorance and incompetence. Doctors should therefore avoid confrontation with patients during the first visits and instead show support and empathy. Diagnosis of DA should be considered after the exclusion of other skin diseases; skin biopsy is therefore necessary. No specific laboratory or imaging studies are required for diagnosis of DA. In our experience, careful observation of the patient, together with occlusive dressings and sometimes topical antibiotics, gives the best treatment results. In Case 1, careful observation helped to diagnose the patient. Further aspects to keep in mind when suspecting DA are the patient's perception of the skin condition, the quality of the patient's life, the length of the medical history, and the number of doctors the patient has been to with the same problem. This is illustrated in Case 1 and Case 5, in which patients provided detailed, self-written documentation of the disease.

The role of psychotropic medication is uncertain and studies have reported contradictory results. Antidepressants can be useful in the presence of depressive symptoms. Selective serotonin reuptake inhibitors (SSRIs) have a better acceptance, with fewer adverse effects. However, they should be administered in the upper dose range in order to achieve therapeutic response. In some cases antipsychotics may be useful, with low dose atypical antipsychotic agents being the treatment of choice. Antipsychotics may be particularly effective in patients with the delusional type of DA [10].

DA is a very expensive disease because of the many diagnostic procedures (eg, blood tests, skin biopsies, skin patch tests, consultations, hospitalizations, radiological studies, and microbiological tests).

Observing DA patients from a psychiatric point of view, it becomes evident that these patients often show signs of personality disorders, such as mood and anxiety disorders, depression, impulsive behavior and somatization [11]. This can be seen in Case 2 where the patient was diagnosed with depression, and in Case 5 where the patient was diagnosed with delusions of parasitosis. Thus, consultation between dermatologist and psychiatrist is strongly recommended in when the patient accepts psychiatric consultation, in order to deliver the treatment in multispecialty modality.

#### **CONCLUSIONS**

The skin is the largest and most accessible organ of our body and it can easily be damaged by patients exhibiting self-mutilating tendencies. Consequently, such patients usually come in contact with a dermatologist before they see a psychiatrist. Close collaboration between dermatologists and psychiatrists is therefore important in diagnosing and treating DA patients.

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