

CLINICAL REPORT

Self-inflicted Skin Diseases. A Retrospective Analysis of 57 Patients with Dermatitis Artefacta Seen in a Dermatology Department

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We analysed clinical symptoms, gender, age and social relations among 57 patients for whom a final diagnosis of dermatitis artefacta was established. The study is retrospective and the patients were seen in our department from 1982 to 2002. We observed that the diagnosis was 2.8 times more common in females than males. Symptoms were most common in the age group 18–60 years, median age 39 years. The skin lesions were 'multiple' among 88% of the patients. When self-infliction was suggested as the cause, two-thirds of patients initially denied it and only one patient agreed to meet with a psychiatrist. Only one-quarter had a job, the rest were unemployed or on sick leave. Many patients (61%) received medical treatment with anxiolytica. Ten patients (18%) had a psychiatric diagnosis. Among our 57 patients, 11 were deceased at the time of our study, but none because of suicide. Four had died before the age of 70, of whom two suffered from alcoholism and two had diabetes mellitus. Therapy should include an optimal nursing relationship with the patient so that social problems can be discussed. Psychological or psychiatric intervention appeared unhelpful because of patient denial. *Key words: pathomimia; self-inflicted skin diseases; psychiatry; psychotherapy.*

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Self-inflicted skin changes are rare, but well-known to dermatologists. They often go undiagnosed for quite some time until the clinical look of bizarre or unusual skin changes combined with non-specific histology and normal blood tests lead to a diagnosis.

Dermatitis artefacta (factitious dermatitis, pathomimia) patients can be difficult to diagnose as the patients initially deny any relation to 'self-infliction', but claim other factors to be of importance. Here, we describe a retrospective analysis of 57 patients, where we reached a diagnosis of dermatitis artefacta. All patients were referred to our university department, which covers a population around 2 million people. The sampling of

patients was done over a 20-year period (1982–2002). This corresponds to approximately 1.5 patients per million per year – a number unlikely to reflect the true incidence of dermatitis artefacta.

MATERIALS AND METHODS

Dermatitis artefacta has the diagnostic code of F68.1B in the WHO diagnostic list (ICD 8). We sampled this diagnosis from our archives, provided that it was the primary diagnosis listed. We then retrieved the charts and went through them looking for parameters that we knew were reliable (gender, age, clinical symptoms, length of contact with the patient, social status and education, cause of symptoms if discussed with the patient and other diagnoses). Initially, we had 82 patients, but 15 charts could not be accounted for. The first three authors went meticulously through the patient records. If in doubt, all authors discussed whether the patient clearly had a diagnosis of dermatitis factitious. Ten patients (15%) were excluded because they were judged to have a concomitant dermatological disease, were children or suffered from mental retardation, leaving 57 patients for further study.

RESULTS

Demographics

Of the 57 patients, 42 (74%) were women (female:male ratio 2.8:1). The median age of all patients was 39 years (range 12–86 years), with no gender difference. On questioning about marriage or living with a partner, one-third had not given any information, but 40% of women were living with a husband or partner in contrast to 20% of the men. In the background population 41% of women and 42% of men are married. Higher education besides obligatory school was lacking among 75% of both genders, which is in contrast to more than 50% in the population having higher education. Only 11 (26%) of 42 patients (where information was reliable) had a job, the rest were unemployed, on sick leave or on a pension. The unemployment rate for Denmark was 12% for women and 9% for men in the given period. We could confirm via the Danish Death Registry that 11 (19%) had died at the time of our investigation. None of these patients had suicide as a cause of death, only four died before the age of 70 years, two with chronic alcoholism and two with diabetes mellitus. We did not seek permission to use Denmark's database system on how many had contact with psychiatric departments,

but we know that 10 had a psychiatric diagnosis (8 neurosis hysteriformis, anxiosa or characterogenes, and 2 depression and schizophrenia). The average follow-up was 4.5 months (median range 1–235 months).

Clinical description

The anatomical regions of skin involved were the face/neck, hands, arms, legs and trunk, which were equally affected in about 40% of cases, whereas the scalp and genital area were only affected in 12% and 3%, respectively. It is noteworthy that only 12% had a solitary lesion, 88% had multiple lesions. The three most common 'objective' lesions were skin ulcers (72%), excoriations (46%) and erythema (30%).

The clinical symptoms are illustrated in Figs 1–6. The common denominator is the lack of symptoms associated with a genuine dermatological disease. Some changes are obviously self-inflicted (see Figs 1 and 2), whereas others are more obscure (see Figs 3–6).

The subjective complaints were 'pain' (59%) and 'itching' (37%), with no gender difference. When the patients were asked how they considered the lesions had developed, 49% said 'unknown', 18% 'trauma', 16% 'allergy', 9% admitted some sort of 'self-infliction', 5% and 4% mentioned 'insect bites' or 'infection', respectively. The doctor's evaluation was not stated for 41% of the patients, but 26% were regarded as some form of mechanical trauma, but without a device, 14% trauma with a device, 14% chemical, and 5% each for 'strangulation' or cold/heat.

Approximately 18% admitted or were judged to have an abuse of alcohol, medicaments or cannabis. A total



Fig. 1. A 37-year-old man who presented with two lesions on his left upper arm. He denied any trauma, but could not explain why the lesions developed. He had no other skin symptoms. Occlusive dressings led to a quick recovery.



Fig. 2. A 42-year-old woman presented the skin changes shown here. She could not give any explanation as to the cause. Occlusive dressings led to a quick recovery.

of 61% were treated with anxiolytic or antidepressive drugs. Among 32 patients occlusive dressing could be administered, and the lesions all showed improvement except in 2 patients. Histological examination showed non-specific changes and blood biochemistry was always normal.

Among 30 patients who were confronted with 'self-infliction' as the cause for their symptoms, one-third admitted that self-infliction was part of the cause, but two-thirds either denied this or stopped coming for further control. Only one woman agreed to meet a psychiatrist.

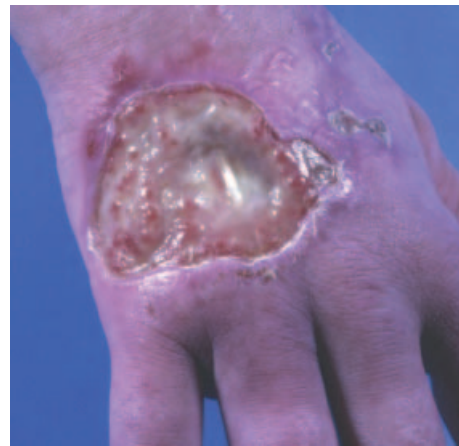


Fig. 3. A 45-year-old woman presented with one large and several small ulcers on the right forearm and right lower arm, denying any chemical or physical damage to the skin. Occlusive dressing led to a quick recovery.



Fig. 4. An 18-year-old girl presented with 'acne excoriee'. She denied self-infliction. Treatment with antibacterial lotion and emollients led to improvement although not complete recovery.

DISCUSSION

Dermatitis artefacta is fortunately a rare, but well-known condition (1–4). It arises as an 'exclusion diagnosis', as the clinical picture is not compatible with known dermatological disorders, and neither blood tests nor histological investigations support a 'specific disease'. Our study shows that it mostly occurs in women (74%) around the age of 39 years (median age). What is remarkable is the high percentage of patient denial of self-infliction and the patient's lack of interest in talking with a psychiatrist.

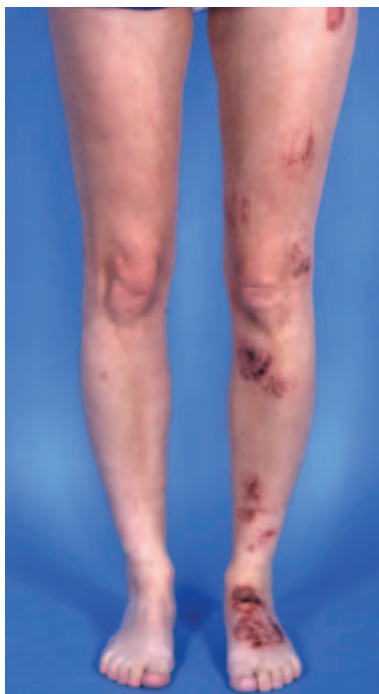


Fig. 5. A 33-year-old woman presented with unilateral erythematous patches and erosions or ulcers on her left leg, denying physical or chemical damage to her skin. Occlusive dressings led to recovery.



Fig. 6. This 52-year-old man was followed for almost 2 years in our department. He complained of 'erosions', which would suddenly develop in his head and neck region. The clinical picture varied from almost healed lesions to sudden involvement of acute erosions affecting most of his head with sharp demarcations. He accepted that he was likely involved in the occurrence of the skin lesions as he felt he had to remove 'disease' from his head. Despite extensive dressings he continued to develop new erosions.

Some skin diseases may be aggravated by stress, although we do not know the exact pathophysiological mechanisms. Self-inflicted skin diseases can derive from obsessive ideas of internal organ changes, which the patient reacts to, or they distract the focus of psychological and/or social conflicts to an organic skin problem. Fruensgaard & Hansen (5) studied 17 'self-mutilating' patients (female:male ratio 3.3) of whom 5 received psychotherapy. Their material seems to differ somewhat from ours in that two patients had a diagnosis of schizophrenia, two had dementia (alcohol and organic solvents), and ten had 'personality disorders'; giving a psychiatric background among 82% of their patients. We observed ten patients (18%) with a confirmed psychiatric diagnosis – likely because our group was more tilted towards patients with 'denial' of self-infliction. Fruensgaard & Hansen had nine patients who attempted suicide, something we did not observe among our patients. The authors judged that many of their patients had a traumatized childhood, thereby developing a propensity to somatize psychological problems. They therefore recommend that some form of psychotherapy should be instituted. Sneddon & Sneddon (6) followed 43 patients (female:male ratio 7.6) among whom 30% suffered from a 'psychogenic illness'.

In our opinion the best treatment is 'nursing care', i.e. the patient is seen at regular intervals and given the correct treatment of the 'ulcers', where occlusive dressings are very important. It is also our opinion that the dermatologists should not confront the patient with the cause until a good relationship has been established,

so that a discussion on the social aspects of the patient's life can be introduced. The use of 'anxiolytica' or 'sedative' medicine may ease the psychological tensions, which lie behind the occurrence of dermatitis artefacta (7).

No doubt, confronting the patient with the diagnosis at first visit is not a solution. However, it is important for the hospital systems to know the diagnosis in order to prevent the patient ending up with a Münchhausen syndrome, as seen in one of our patients. This was a 34-year old lady, unmarried, with approximately 125 contacts with various somatic departments in Denmark over a 10-year period.

Recently, the existence of 'functional somatic syndromes' (8, 9) has been recognized. However, these syndromes, like chronic fatigue syndrome, irritable bowel syndrome, fibromyalgia and others, do not carry objective changes, which self-inflicted skin diseases always do. Therefore, it does not seem correct to include self-inflicted skin diseases in the functional somatic syndrome, although the basic psychological disturbances may overlap.

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REFERENCES

1. Joe EK, Li VW, Magro CM, Arndt KA, Bowers KE. Diagnostic clues to dermatitis artefacta. *Cutis* 1999; 63: 209–214.
2. Koblenzer CS. Dermatitis artefacta. Clinical features and approaches to treatment. *Am J Clin Dermatol* 2000; 1: 47–55.
3. Harth W, Mayer K, Linse R. The borderline syndrome in psychosomatic dermatology. Overview and case report. *J Eur Acad Dermatol Venereol* 2004; 18: 503–507.
4. Wang CK, Lee JY. Monosymptomatic hypochondriac psychosis complicated by self-inflicted skin ulceration, skull defect and brain abscess. *Br J Dermatol* 1997; 137: 299–302.
5. Fruensgaard K, Hansen HF. Disease patterns seen in self-mutilating patients. *Nord Psykiatr Tidsskr* 1988; 42: 281–288.
6. Sneddon I, Sneddon J. Self-inflicted injury. A follow-up study of 43 patients. *BMJ* 1975; 3: 527–530.
7. Gupta MA, Gupta AK. The use of antidepressant in dermatology. *J Eur Acad Dermatol Venereol* 2001; 15: 512–518.
8. Wessely S, Nimnuan C, Sharpe M. Functional somatic syndromes: one or many? *Lancet* 1999; 354: 936–939.
9. Barsky AJ, Borus JF. Functional somatic syndromes. *Ann Intern Med* 1999; 130: 910–921.