Neurotic Excoriations: A Review and Some New Perspectives

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Neurotic excoriation is a commonly encountered dermatologic syndrome, which is usually associated with psychiatric pathology, most commonly obsessive-compulsive traits and depression. This disorder typically runs a chronic course. In addition to symptomatic dermatologic treatments for the self-inflicted excoriations and secondary pruritus, the treatment for this disorder is primarily psychiatric. In spite of this, neurotic excoriation has received little attention in the psychiatric literature, probably reflecting a lack of adequate collaboration between the dermatologist and the psychiatrist. This article critically reviews the literature on this disorder, and presents the salient features of five consecutive cases seen at the psychiatry-dermatology liaison clinic at our hospital. Possible etiology and treatment strategies in a previously unreported subgroup of patients with seemingly intractable symptoms are discussed. Further, the review highlights the fact that knowledge of this symptom complex is important for all psychiatrists, since it is frequently a "cutaneous sign" of psychopathology.

NEUROTIC EXCORIATION is a disorder which has received little attention in the psychiatric literature.[1] It is a dermatologic syndrome where lesions are produced by the patient as a result of repetitive self-excoriations, in the absence of underlying physical pathology[2] and usually in association with psychiatric pathology.[1,2] Unlike other self-inflicted dermatoses, such as dermatitis artefacta and malingering, the patients acknowledge the self-inflicted nature of their lesions.[2] The lesions vary in number, ranging from a few to several hundred. On occasion this syndrome has been associated with suicide.[1] In addition to topical dermatological preparations which are used for the symptomatic management of the self-inflicted cutaneous lesions and secondary pruritus, the treatment for this disorder is primarily psychiatric. In our experience at the psychiatry-dermatology liaison clinic, it is a relatively common disorder among both outpatients and inpatients. Therefore, further understanding of this disorder is important for the psychiatrist doing consultation work. Furthermore, the lesions are a "cutaneous sign" of psychopathology and knowledge of their existence can aid the overall assessment of any psychiatric patient.

In this article, we present a review of the demographic and clinical features and treatments for this disorder and present the salient features of five consecutive cases seen at our clinic over a 3-month period. All patients presented with some consistent clinical features which have important treatment implications that have not been previously reported.

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REVIEW OF THE LITERATURE

Review of the literature[1,3-9] reveals that none of the studies have defined the operational criteria used to diagnose the psychiatric syndromes associated with neurotic excoriations. All except study by Freunsgaard[1] are uncontrolled and none have evaluated the treatments for this disorder in a controlled fashion.

Demographic Features

There is a 2% incidence[10] of neurotic excoriations among dermatology clinic patients, and a 9% prevalence[11] among inpatients with pruritus, with a higher prevalence among females in most studies.[1,3-5] The prevalence of this disorder among psychiatric patients is not known. In the studies,[1,3,7,8] the mean age at onset of cutaneous symptoms is in the range of 30 to 40 years; however, some have reported a peak incidence in the 20s.[2]

Clinical Features

The scratching and subsequent cutaneous lesions may be the result of an itch, "a disturbing sensation" in the skin distinct from pruritus[12] or because of an urge to excoriate a benign irregularity on the skin.[1,4,6,13] This initiates and perpetuates the itch-scratch cycle[14] which in some patients becomes a true compulsive ritual.[1,13] The majority scratch when they are unoccupied,[1] or at the end of the day before retiring, which is consistent with the fact that the itch threshold is lower at night.[14] The lesions look unremarkable and are typically a few millimeters in diameter, weeping, crusted or scarred, with post inflammatory hypopigmentation or hyperpigmentation.[2,15] In chronic cases, scarring may be the only sign.[15] They are distributed in areas that the patient can reach, typically affected regions being the upper and lower extremities, face, and upper back.[2]

The extent and degree of self-excoriation is reported to be "proportional to the distortion of the personality."[13] Perfectionistic or obsessive compulsive traits,[1,3,6,16-18] anxiety,[1,6,16] depressive symptoms,[1,3,16] conversion reaction,[3,6,16] hysteria,[4,5] hypochondriasis,[1] a mixture of neurotic states including severe psychoneurosis,[1,4,6,13] paranoid schizophrenia,[13] and other marked mental disease[7] and psychosis[6] have all been reported in association with this syndrome. This nosological confusion, reflecting the lack of operational definitions is superimposed upon the fact that the majority of the studies are more than 20 years old. Up to one third of these patients also have tension[1,6] or migraine headaches[1] and gynecological symptoms related to menstruation[1] and it is possible that in some instances, this indicates an underlying somatization disorder (DSM-III criteria). Many have observed difficulty with expression of anger among these patients[1,2,8,12,13,19,20] and some have proposed that their electroencephalogram (EEG)[21] and neuropsychological testing[22] support this. Psychosocial stressors have been reported to precipitate the cutaneous symptoms in 33% to 98% of patients.[1,10,16]

Course and Prognosis

The mean duration of symptoms is reported to be 5.1 years[20] with the majority having symptoms for ten to 12 years.[1] Prognosis was better when symptoms had been present for less than 1 year,[1] and worse when concomitant physical complaints such as tension headaches were also present.[6] Improvement of cutaneous lesions was associated with improvement in the mental state of the patient.[1]

Treatment

The patients typically deny any psychological problems and usually refuse psychiatric intervention initially.[23] Freunsgaard[1] observes that the psychiatric interview alone can initiate improvement in some patients. An empathic, supportive approach,[3,23] has been reported to be significantly more effective than insight oriented psychotherapy[20] which often exacerbates the symptoms. In addition to symptomatic dermatologic treatments for pruritus and secondary excoriations, Benzodiazepines,[24,25] Amitriptyline (50 to 75 mg/d)[3] and Pimozide (4 to 6 mg/d)[26] have been used to treat neurotic excoriations. The use of psychotropic drugs in pruritic states and other dermatologic conditions is the subject of another paper.[26]

PATIENTS

Five consecutive patients with neurotic excoriations diagnosed after a dermatologic evaluation including skin biopsy and after systemic causes of pruritus were excluded, all presented with similar clinical features. At the time of the psychiatric assessment, they had all not responded satisfactorily to a minimum of a 1-year course of standard dermatologic treatments including antihistamines and topical steroids. The mean age at onset of the cutaneous syndrome was 62.1 $\pm$ 4.2 years, median age was 61.5 years. The mean age of the patients at the time of consultation was 65.8 $\pm$ 6.1 years, median age was 66 years. Premorbidly, they had all led very physically active lives and had taken great pride in staying "busy." All developed the syndrome of neurotic excoriations 1 to 3 months after their physical activity was significantly limited due to onset of physical ill health, for example, injury, severe arthritis, and heart disease. The psychiatric diagnosis (DSM-III criteria) in all patients was adjustment disorder with atypical features. All had compulsive personality traits (DSM-III criteria). The skin lesions of the one patient who consented to have psychiatric treatment improved dramatically after 4 1/2 years of unsatisfactory response to standard dermatological treatments. Her case is discussed below. The other patients refused further psychiatric intervention after the initial assessment.

CASE REPORT

This 66-year-old single woman, living by herself, and forced to retire early at the age of 61 years from her job as a medical secretary because of generalized osteoarthritis, first developed a skin rash and pruritus 2 months after her retirement. Six months after retirement she presented to the Dermatology Department of the Toronto Western Hospital with shallow excoriated ulcers in various stages of development, involving her back, arms, forearms, buttocks, and shins. Figure 1 depicts a typical lesion in this patient. Scarred lesions were noted over the dorsum of her hands and her shins. Her symptoms had not responded to a four-year course of standard dermatologic treatments and diazepam (5 mg twice a day [b.i.d.]) for 1 year.

She excoriated herself several times a day until she started to bleed and only then would she experience relief. Her symptoms did not interfere with her sleep. Premorbidly, she had always kept busy. Typically, she would leave home at 7 AM and return after 10 PM. Since retirement, her arthritis markedly limited her capacity to partake in physical activities she enjoyed, for example, visiting sick church members at home during the evening and running errands for them, which were both done by foot or public transportation. In her past health, she had experienced two major depressive episodes, in her 20s and early 30s following the death of her fiance and after a hysterectomy. She had not sought psychiatric help and recalled dealing with the depression by staying very busy. There were no cutaneous symptoms. She had grown up in an orphanage until age 7, subsequent to which she spent time in several foster homes until age 13, when she became self-supporting. She had often held more than one job at a time. Mental status examination revealed a tiny, slim, well-groomed, articulate woman, who talked rapidly

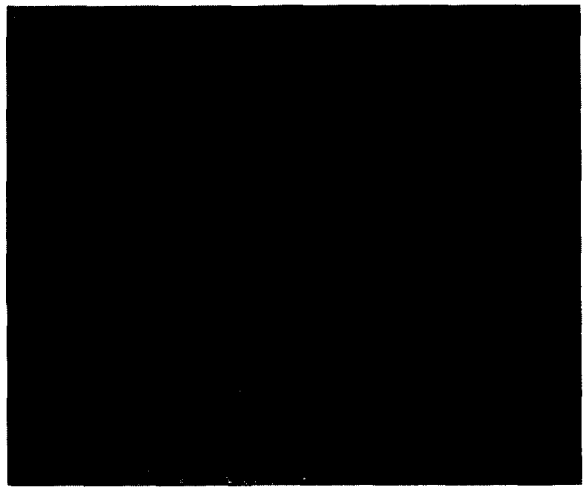

Fig. 1. A typical self-excoriated cutaneous ulcer in a 67-year-old woman with neurotic excoriations of 4 1/2 years duration.

about all the activities that she used to enjoy before the onset of her osteoarthritis. Her speech was not pressured. She was not depressed. The rest of her mental status examination, including her cognitive function was unremarkable.

The patient was seen in supportive psychotherapy two times per month and encouraged to cultivate new interests. She rekindled her interest in singing and music, and within 6 weeks became very active in the church choir. She reported improvement in her itching with significant objective improvement in her cutaneous lesions 2 weeks subsequently. Since pruritus is a primarily subjective experience, it was evaluated on a 10-point self-rating scale where 10 was the "worst imaginable" itch and 1 was "no itch". Objective ratings, and a similar self-rating scale were used to monitor the rash. She self-rated her pruritus and rash as a 9 to 10 at the time of the initial consultation and at a 4 to 5 at this time. After 3 months, she developed a major depressive episode (DSM-III criteria). The Hamilton Rating Scale for Depression (HRS-D) score was 30, on the 17-item questionnaire. She was started on clomipramine (25 mg every night at bedtime [q.h.s.]), which was soon increased to 50 mg q.h.s. within 1 week. She was not suicidal and refused hospitalization. A low dose of clomipramine was used because of her relatively low body weight and age, and reluctance to use any psychotropic drugs in case they "slowed her down". During this depressive episode her general level of activity was significantly reduced. After three weeks on clomipramine (50 mg/d), she experienced improvement in her depression (HRS-D = 16) along with further improvement in her pruritus (rated 2) and rash (rated 2). She recalled experiencing improvement in the pruritus during her first week on clomipramine (25 mg q.h.s.). She decided to discontinue the clomipramine after a 6-week course. Within 2 weeks, she experienced a worsening in her pruritus (rated 6) and excoriations (rated 5), and recurrence of some of her depressive symptoms (HRS-D = 12). At this point, she was restarted on clomipramine (50 mg q.h.s.) and again experienced improvement in her pruritus (rated 2) and rash (rated 2) within 1 week. She remained on clomipramine (50 mg q.h.s.) for 6 months and maintained improvement in her mental state (HRS-D = 6 to 7) and cutaneous symptoms (both rated as 0 to 1). Objectively, there has been a marked improvement in her skin rash. For over 2 months now, she has not been on any antidepressants and has had no new lesions. The patient remains very active in her church activities. This degree of improvement in her cutaneous condition has not been previously noted since the onset of her symptoms more than $4\frac{1}{2}$ years ago.

DISCUSSION

It is possible that in patients with recent onset of major physical illness the syndrome of neurotic excoriation has been overlooked because other medical conditions usually demand more urgent attention. The development of repetitive self-excoriation following decreased physical mobility is similar to other repetitive motor

phenomena, like tics, that have been observed in wild animals held in captivity.[27] Ethologically, scratching is considered a "derived activity" arising in reaction to frustration,[28] and the premorbid compulsive personality traits and increased levels of physical activity in our patients may have predisposed them to the development of repetitive self-excoriation behavior when their mobility was restricted. Further, a recent history of stressful life events[29] has been associated with increased sensitivity to an experimentally induced itch stimulus.[30] While the mechanisms underlying this phenomenon are not known, it is possible that similar mechanisms also contributed to the self-excoriations in our patients. The mean age at onset of cutaneous symptoms in our patients is higher than the previously reported peak age of incidence. As there is a higher incidence of both idiopathic pruritus[31] and physical debilitation with advancing age, our observations suggest that in some instances these two states may be related.

A primarily supportive approach that facilitates physical activity appears to be helpful for these patients with relatively inflexible personality traits and little psychological insight. Response of the longstanding pruritus to a 1 week course of low dose clomipramine was observed early in the course of drug treatment and most likely occurred independent of the improvement in depression. Since pruritus and pain share the same CNS pathways,[31] and possibly also the same peripheral mediator,[32,33] the analgesic[34] rather than the antihistaminic effect of clomipramine appears to have been important in alleviating pruritus in our patient, as she had previously not responded to antihistamines. The repetitive behavior of self-excoriation, which did not reach the proportions of a true compulsive ritual may have further responded to clomipramine which is effective in the management of obsessive-compulsive behavior in the presence or absence of depressive symptoms.[35,36]

This case is the first report to our knowledge that emphasizes the importance of physical activity in a subgroup of patients with neurotic excoriations and demonstrates that tricyclic antidepressants can serve as a helpful adjunct in the treatment of this disorder. The importance of this observation lies in its implications for prognosis and treatment as well as in the elucidation of the pathogenesis of neurotic excoriations. Our observations and the review of the literature indicate the heterogeneity of this disorder and highlight the need for awareness among psychiatrists of this self-mutilative behavior which does not stand out as being particularly unusual on initial inspection unlike other self-mutilative acts such as wrist slashing, or bizarre looking lesions seen in other self-inflicted dermatoses.

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