Tidsskriftet Tidsskrift for Den norske legeforening

Skin picking disorder

CLINICAL REVIEW

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Skin picking disorder is an under-recognised mental disorder that typically starts during adolescence and leads to considerable emotional distress and/or reduced functioning in important areas of life. Repeated picking at the skin happens despite efforts to stop. Feelings of lack of control and shame are prominent, and anxiety disorders and depression are common comorbidities. SSRIs and n-acetylcysteine may be beneficial, but cognitive behavioural therapy is probably more effective.

Skin picking disorder is classified as an obsessive-compulsive and related disorder. The disorder is characterised by scratching, squeezing and picking of the skin resulting in the formation of visible lesions and scabs and repetition of the behaviour despite efforts to stop. Skin picking at lesions or skin irregularities is a bad habit many people can relate to. Therefore, it can be difficult both for the person concerned and healthcare professionals to understand that the behaviour and its consequences may be a manifestation of a mental disorder. In terms of incidence, few people come forward for treatment, which may be related to shame or trivialisation (1).

This article is based on clinical experience and research and aims to give healthcare professionals a starting point for understanding, identifying and initiating treatment measures for skin picking disorder. A judicious selection of literature has been made.

Diagnosis

ICD-11 criteria (2) are similar to DSM-5 criteria (3) and classify skin picking disorder as an obsessive-compulsive and related disorder (OCRD). The diagnosis requires significant emotional distress or impaired functioning in at least one important area of life (academic, occupational or social) (2, 3).

ICD-10 (4) uses the terms *Neurotic excoriation* (L98.1) or *Other habit and impulse disorders* (F63.8). Other terms are dermatillomania, psychogenic excoriation and body-focused repetitive behaviour disorder.

Incidence and clinical presentation

Skin picking disorder usually starts in adolescence, when acne can be a trigger, but in some people the onset of the disorder is not until well into adulthood. The condition also occurs in children (1). The point prevalence is reported to be between 1.9–2.1 % and lifetime prevalence between 3.1–5.4 % (5, 6). More women than men seek treatment, but screening studies suggest a less pronounced difference between the sexes with approximately 55 % women (5). Comorbidities are common, particularly generalised anxiety disorder and depression (5). Low scores on physical and mental health quality of life measures seem to apply irrespective of comorbidities (6).

The picking often starts by the patient examining their skin, including in the mirror, or feeling irregularities in the skin. Some patients report that they often pick entirely healthy skin. A distinction is usually made between two forms of skin picking, with patients alternating between these. Automatic skin picking occurs more or less unconsciously and alongside activities such as driving, watching TV or reading (1). Focused skin picking is more conscious and often accompanied by a form of urge. This may be the idea that irregularities like scabs, lesions or pimples must be 'got out' or removed, or a physical feeling of skin itching or tingling. All accessible skin surfaces are affected, particularly the face, hands, fingers and arms. Some people use instruments, for example tweezers or needles. Skin picking or camouflaging lesions and scars is time consuming, and some people spend several hours daily (1).

Sick leave and problems in work, school and social situations are common (1). Other consequences are infection and chronic lesion and scar formation, as well as musculoskeletal pain. The disorder is associated with shame and avoidance behaviour. Some people isolate themselves, and suicidal ideation is not uncommon (1).

Psychopathology

Difficulties with emotional regulation, low impulse control, increased skin sensitivity and low tolerance for the sight of skin irregularities are some of the factors that may predispose to skin picking disorder (7–10). Focused picking in particular can be understood to be an attempt to down-regulate or avoid experiences (internal states) of discomfort, urge to pick or boredom. There seems to be a positive correlation between the degree of this avoidance and the severity of the skin picking disorder (10).

Automatic picking often appears more as a form of self-stimulation (1). Many people describe an immediate relief that is rapidly replaced by anger and shame. The pattern helps to reinforce a behaviour that has a number of

negative consequences over time.

Genetics and neurobiology

Skin picking, nail biting and hair pulling are regarded as related and come under the umbrella term *body-focused repetitive behaviour* (10, 11). A high incidence of obsessive-compulsive disorders (OCD), OCD-related disorders, Tourette's syndrome and tics have been recorded in families where this behaviour is pathological (11). In mouse models, excessive grooming of skin and hair has been associated with deletion of the *SAPAP3* gene, which codes for post-synaptic scaffolding proteins in the neuronal signalling system (12).

People with skin picking, other body-focused repetitive behaviour and obsessive-compulsive disorders have been reported to have a high frequency of polymorphisms associated with decreased function of the SAPAP3 protein (12). The striatum has a higher expression of SAPAP3 protein than other brain regions (13). Results of imaging studies and functional tests include *nucleus accumbens* abnormalities (1, 13).

Diagnosis and differential diagnoses

Shame and a sense of loss of control or not being able to stop skin picking are often a good indication of skin picking disorder. A number of mental health and medical conditions are similar, but have important differences to skin picking disorder. In people with delusions about the skin, known as *parasitophobia* or delusional infestation, the motivation for skin picking may be to remove imaginary parasites or foreign bodies. Patients with *dysmorphophobia*, a pathological concern with appearance, describe that the skin picking is needed to fix the skin's appearance (1). Non-suicidal self-injury often serves to distract from mental pain, and there seem to be greater difficulties with interpersonal relationships and interactions (14). The motivation in *dermatitis artefacta* is often to attract attention and care, and the patient denies that the skin injuries are self-inflicted (1). A predominant clinical presentation of excoriated and ulcerated lesions may be found in eczema and *prurigo nodularis* (1, 15).

The diagnosis of skin picking disorder should not normally be used if the skin picking is better explained by other disorders. Nevertheless, a secondary diagnosis of skin picking disorder may be made if the patient perceives that the picking causes problems. If in doubt, clarification with a dermatologist or psychiatrist would be beneficial.

Medication

Most research has been conducted with antidepressants in the class of selective serotonin reuptake inhibitors (SSRI), but randomised controlled trials (with 20–45 participants) have not generally been able to demonstrate a significant change in the primary outcome measure. Nevertheless, taken together with several open-label trials, it does seem that some people benefit from SSRI drugs (15, 16).

Initial positive findings regarding the use of lamotrigine in an open-label trial could not be reproduced in a randomised controlled design (15, 16). In recent years, the amino acid derivative n-acetylcysteine, which can modulate glutamatergic signalling, has received attention for the treatment of OCD-related disorders. A randomised controlled trial with 66 participants demonstrated a notable improvement in around half of those who received active treatment compared to a quarter of the control group (13).

Cognitive behavioural therapy

There are a handful of controlled trials into cognitive behavioural therapy, including habit reversal training, for skin picking disorder (16, 17). None of these make a comparison with medication. Three of the trials had wait-list control, with 19, 34 and 133 participants respectively. There was a significant reduction in symptom scores compared to the wait-list control (16–18). This corresponded to clinical remission in over 50 % of those in the intervention group after 4 sessions of individual therapy (17). The results were slightly weaker for an internet-based self-help programme, which may be due to a higher drop-out rate (18).

Cognitive behavioural therapy for skin picking disorder generally involves habit reversal training or elements of this. Habit reversal training consists of awareness training concerning picking urges and picking situations, education about competing response and modification of physical circumstances (15). The aim of competing response is to make it physically impossible to pick and can be literally clenching the fingers together in a fist for a minute in the event of urges or when the person becomes aware that they are picking. Physical circumstances can be modified with the use of gloves, plasters around fingers, cutting nails or removing/covering mirrors.

Acceptance and commitment therapy

The documentation on standard cognitive behavioural therapy and habit reversal training mainly concerns symptom reduction, such as reduced frequency and severity of skin picking and skin lesions (15–17). We know less about clinical course over time (relapse) and comorbidities (15, 19). A limited

number of non-controlled trials (with 5–35 participants) on acceptance and commitment therapy, a newer form of cognitive behavioural therapy, gives cause for optimism (19).

While classic cognitive behavioural therapy places emphasis on gaining an understanding of misconceptions and thought content, but is not guided by these, acceptance and commitment therapy focuses on developing and practising an accepting attitude to thoughts, feelings, physical sensations, picking urges or boredom rather than attempting to avoid, control or escape from them. The treatment also promotes a 'commitment' to choices in line with the patient's own life goals and values, which is beneficial for skin picking (15).

In Norway, acceptance and commitment therapy is offered in combination with habit reversal training in groups to patients with skin picking disorder and hair pulling disorder (trichotillomania). Four to six patients meet weekly in these groups over ten weeks. We found that a majority of patients with hair pulling disorder maintained their improvement after one year (20), and it is hoped that the same would apply to skin picking disorder. Currently, only the South-Eastern Norway Regional Health Authority offers this provision to patients with skin picking disorder, and referral must take place via a local district psychiatric centre (DPS).

Conclusion

Healthcare professionals should be aware of skin picking disorder and recognise that it is a mental disorder with considerable impact on quality of life and/or functioning. Diagnosis, psychoeducation, n-acetylcysteine supplementation and trialling of internet-based treatment can be performed in the primary care sector. The most serious cases of skin picking disorder, as well as relapses, should be referred for evaluation and treatment in the specialist health service. Research is needed to find out more about the effect of psychological treatment and which patients benefit the most or should be prioritised.

Many thanks to Jon Anders Halvorsen for input to the manuscript.

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Publisert: 13 December 2021. Tidsskr Nor Legeforen. DOI: 10.4045/tidsskr.21.0128
Received 15.2.2021, first revision submitted 8.8.2021, accepted 28.9.2021.