

SPECIAL REPORT

## Self-Inflicted Lesions in Dermatology: Terminology and Classification – A Position Paper from the European Society for Dermatology and Psychiatry (ESDaP)

Uwe GIELER<sup>1</sup>, Sylvie G. CONSOLI<sup>2</sup>, Lucía TOMAS-ARAGONES<sup>3</sup>, Dennis M. LINDER<sup>4</sup>, Gregor B. E. JEMEC<sup>5</sup>, Françoise POOT<sup>6</sup>, Jacek C. SZEPIETOWSKI<sup>7</sup>, John DE KORTE<sup>8</sup>, Klaus-Michael TAUBE<sup>9</sup>, Andrey LVOV<sup>10</sup> and Silla M. CONSOLI<sup>11</sup>

<sup>1</sup>Department of Psychosomatic Medicine, Justus Liebig University, Giessen, Germany, <sup>2</sup>Dermatologist and Psychoanalyst, Paris, France, <sup>3</sup>Department of Psychology, University of Zaragoza and Aragon Health Sciences Institute, Zaragoza, Spain, <sup>4</sup>Departments of Dermatology, Padua University Hospital, Padua, Italy and University Clinic of Medical Psychology and Psychotherapy, Medical University of Graz, Graz, Austria, <sup>5</sup>Roskilde Hospital; Health Science Faculty, University of Copenhagen, Copenhagen, Denmark, <sup>6</sup>Université Libre de Bruxelles, Erasme Hospital, Brussels, Belgium, <sup>7</sup>Department of Dermatology, Venereology and Allergology, Wrocław Medical University, Wrocław, Poland, Departments of Dermatology, <sup>8</sup>Academic Medical Center, University of Amsterdam, Amsterdam, The Netherlands, <sup>9</sup>University of Halle, Halle, Germany and <sup>10</sup>State Research Center of Dermatovenerology and Cosmetology, Moscow, Russia, and <sup>11</sup>Department of Consultation Liaison Psychiatry, Paris Descartes University, Sorbonne Paris Cité, Faculty of Medicine, Paris, France

**The terminology, classification, diagnosis and treatment of self-inflicted dermatological lesions are subjects of open debate. The present study is the result of various meetings of a task force of dermatologists, psychiatrists and psychologists, all active in the field of psychodermatology, aimed at clarifying the terminology related to these disorders. A flow chart and glossary of terms and definitions are presented to facilitate the classification and management of self-inflicted skin lesions. Several terms are critically discussed, including: malingering; factitious disorders; Münchhausen's syndrome; simulation; pathomimicry; skin picking syndrome and related skin damaging disorders; compulsive and impulsive skin picking; impulse control disorders; obsessive compulsive spectrum disorders; trichotillomania; dermatitis artefacta; factitial dermatitis; acne excoriée; and neurotic and psychogenic excoriations. Self-inflicted skin lesions are often correlated with mental disorders and/or pathological behaviours, thus it is important for dermatologists to become as familiar as possible with the psychiatric and psychological aspects underlying these lesions. Key words: classification; self-inflicted skin lesions; dermatitis artefacta; impulse control disorders; obsessive-compulsive-spectrum disorders; self-injury.**

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Lucía Tomas-Aragones, Department of Psychology, University of Zaragoza, C/ San Juan Bosco, 7, ES-50009 Zaragoza, Spain. E-mail: ltomas@unizar.es

Self-inflicted skin lesions (SISL) involve different health professionals: first of all dermatologists, but also general practitioners, internists, psychiatrists, psychologists and psychotherapists. These health professionals often refer to different and even contradictory classification systems, while many of the patients presenting such lesions need

a coherent multidisciplinary approach and good communication between the involved caregivers. In general, SISL are symptoms that are clearly correlated with mental disorders, and therefore require some familiarity with psychiatric issues on behalf of dermatologists and an efficient referral practice.

The terminology, classification, diagnosis and treatment of diseases underlying self-inflicted dermatological lesions are subject to on-going debate and discussion. One-third of physicians treating patients with dermatological factitious disorders believe that they are insufficiently informed with regards to a diagnostic approach (1). The current situation prevents the dissemination of basic and practical information in this field.

There are many different terms and descriptions employed in the literature on SISL, which may be confusing and might prevent the systematic study of symptoms and the development of a clinically relevant classification that could be conducive to specific therapeutic options. In part, this is because many papers do not distinguish between factitious disorders and skin picking syndromes, in the strict sense of this term (2). A plethora of terms, such as self-harm (3), dermatitis artefacta (4, 5), auto-destructive syndrome (6), self-injury (7), self-mutilation (8), neurotic excoriations (9, 10) and psychogenic excoriations (11), have all been used for overlapping symptoms and clinical features.

Epidemiological data suggest that SISL are more common than previously thought (12). In a review of 18 studies reporting prevalence data on SISL from a combined cohort of 52,000 patients, the rates of SISL ranged from a minimum of 0.03%, to a maximum of 9.4% (weighted mean 0.9%) (6). SISL appear to be less frequent in males than females, with a reported sex ratio between 1:3 and 1:20 (5, 13).

A clearer classification approach and a unified terminology to facilitate communication among care providers could result in better healthcare for these often difficult and “disarming” patients.

This position paper is the result of the work of a group of experts from the European Society for Dermatology and Psychiatry (ESDaP) that aims to clarify the terminology and classification of SISL in an effort to illustrate the issues for clinical dermatologists with an interest in psychodermatology.

## METHODS

A glossary of terms and definitions aimed at clarifying the terminology and classification of SISL, and a flow chart to accompany dermatologists' diagnostic approach, were developed through a process of consensus decision-making by a group of specialists from 2 disciplines: dermatology and mental health. A task force of dermatologists, psychiatrists and psychologists, all active in the field of psychodermatology and members of ESDaP, was constituted. The authors met 4 times in face-to-face meetings, during scientific meetings of the European Academy of Dermatology and Venereology (EADV) and of ESDaP, and once during a specific meeting dedicated to this issue. Regular e-mail correspondence was also used in order to continue the debate and finalize the written report.

The first step in this process included a pilot search of the existing PubMed literature, using the following key words: "self-inflicted skin lesions", "self-inflicted injuries and dermatology", "self-harm and dermatology", "factitious disorders and dermatology", "dermatitis artefacta", "Münchhausen's syndrome", "simulation", "pathomimicry", "skin picking syndromes", "trichotillomania" and "psychogenic excoriations". In addition, terms defining less frequent syndromes ("rhinotillexomania", "trichotillomania", etc.), or older ones ("neurotic excoriations"...) were searched for. In order to develop a flow chart, "psychiatric" expressions unfamiliar to dermatologists were also introduced, such as "impulsive behaviour", "compulsive behaviour" and "impulse control disorder".

The second step consisted of discussions among the members of the task force as to whether the preliminary classification would fit in their daily clinical practice, and in dermatological practice at large. Advantages and limitations, including the risk of confusion and/or misinterpretations related to alternative terminologies, were also discussed. In case of disagreement, diagnostic conventions adopted by mental health professionals (International Classification of Diseases, Tenth Revision (ICD-10) and the 4<sup>th</sup> edition of the Diagnostic and Statistic Manual of the American Psychiatric Association (DSM-IV-TR) (14, 15)) were used as external criteria in final decision-making.

## RESULTS AND DISCUSSION

### *Self-inflicted skin lesions: general definition*

This paper proposes the utilization of the diagnostic category of SISL as synonymous to "pathological SISL", in order to restrict this classification to dermatological lesions whose cause implies pathological behaviour.

The concept of SISL belongs to the wider field of cutaneous modifications induced by subjects' behaviour. Non-pathological procedures of the skin (e.g. piercings or tattoos) regularly occur due to cultural, ritualistic or socio-aesthetic incentives, and even though these procedures, if performed without a curative intent, may even-

tually lead to dermatological complications and thereby involve dermatologists, they fall outside the scope of this paper, due to their normal psychological and non-pathological nature. It might nevertheless be the case that some of these socio-aesthetic procedures are an indication of a severe underlying problem, such as body dysmorphic disorder (BDD). Aesthetic interventions requested by patients form an intermediate group, as they may be motivated by underlying mental disorders (anxiety, mood disorders, delusions, etc.), or at least a certain level of psychological suffering, and thus share some of the characteristics of SISL. It should be emphasized that when some of these surgical or cosmetic interventions lead to permanent skin damage, the latter cannot be considered as "self-inflicted", although it is the subject's behaviour that leads to iatrogenic complications. It could be said that, in these cases, self-harm was delegated to health professionals, as in Münchhausen's syndrome (see below).

The expression SISL is preferred when referring to a set of syndromes that do not encompass all the skin lesions due to pathological behaviour. In psychiatric practice, classification traditionally requires that when a symptom or a set of symptoms is better explained by a well-identified mental disorder, the diagnosis should then be related to that psychiatric disorder. For example, if the presence of delusions and/or hallucinations is associated with, and explained by, a mood disorder (manic state or a major depressive episode), the diagnosis of mood disorder prevails over that of delusional state. Self-mutilations may therefore occur in a spectrum of primarily psychiatric diagnoses; for example, in autistic spectrum disorders, schizophrenia or mental retardation, which would be the main diagnosis used and the basis of therapeutic management in such cases (16, 17). Consequently, self-mutilations seen in other mental disorders should not be included in the restricted category of SISL, although when clinical dermatologists see these patients, they will also see skin lesions which have been self-inflicted and which can be considered as indicators of the underlying problem. The same principle should be applied to skin damage due to phlebotomy in suicide attempts, cutaneous consequences of eating disorders or substance use disorders, and skin or even deeper body self-injury seen in patients with various body delusions or hallucinations. Dermatologists are familiar with the cutaneous consequences of repetitive washing in patients with obsessive compulsive disorder (OCD), and they usually see patients with delusional infestation (also called delusional parasitosis) (18) before mental health professionals do. Delusional infestation can sometimes present with skin lesions due to scratching and even skin picking in a search for imagined parasites. In all these cases, the prevailing diagnosis will not be that of SISL, but that, for example, of suicide attempt, OCD, or delusional infestation.

Table I. Self-inflicted skin modifications or alterations

Underlying behaviour	First health professional visited	Specific mental health diagnosis	Examples
Non-pathological	None	No	Tattoos, piercing, ritualistic scars, body art etc. Non-pathological skin picking and grooming behaviour
Pathological	Dermatologists, aesthetic surgeons	No	Aesthetic interventions
	Mental health specialists (and other non-dermatological specialists)	Yes	Self-mutilations, suicide attempts, cutaneous consequences of eating disorders or substance abuse
	Dermatologists and/or mental health specialists.	Yes	Skin lesions due to compulsive hand washing in patients with obsessive compulsive disorder, dermatological complaints and skin lesions in patients with body dysmorphic disorder
	Dermatologists	Yes	Skin lesions associated with delusional infestation
	Dermatologists, aesthetic surgeons	No	Factitious disorders and malingering, pathological skin picking and related skin damaging syndromes

These skin lesions, primarily caused by mental diseases with multiple (and not only dermatological) expression, are all non-natural dermatological disorders in general and should not be considered as part of the restricted domain of “SISL”. The non-natural (but behavioural) origin of all these skin lesions has sometimes led to the classification of “factitious disorders” in the scientific literature (2). The authors of this paper recommend avoiding this over-large and confusing classification and the restriction of the term to a specific pathological category described below.

SISL can thus be defined as any skin lesion actively and directly produced by the patient on his/her skin, mucosa or integuments that is not better explained as a consequence of another physical or mental disorder.

Table I summarizes these first principles of categorization.

*Classification procedure*

There are 3 questions that are helpful for the classification of abnormal behaviour that potentially leads to somatic damage (Fig. 1):

- Is the behaviour responsible for the somatic damage denied or kept “secret” by the patient? A “yes” answer points to a factitious disorder<sup>1</sup>.
- If the answer to the first question is “yes”, are there any external incentives? A “yes” answer indicates malingering, a “no” answer points to factitious disorders<sup>2</sup>.

<sup>1</sup>Obviously, dermatologists should refrain from asking patients with suspicious skin lesions direct and confronting questions: “Are you responsible for the lesions on your skin?” Rather, open-ended questions should be formulated: “How did these lesions appear?” Answers such as “I don’t know!” or “I have no idea!” or “It is certainly not me!” point to a possible underlying pathological behaviour, denied or kept secret by the patient. On the other hand, answers like “When it itches, I can’t stop picking my skin” or “When I am tired, I pull my hair without realizing it” confirm patients’ responsibility for their lesions, even though they refer to mitigating circumstances.

<sup>2</sup>Here too, dermatologists should not expect patients to disclose the presence of external incentives for inducing their lesions. However, obtaining information on patients’ history – including their social, occupational and financial contexts – can shed light on the subject.

- If the answer to the first question is “no”, is the behaviour responsible for the somatic damage compulsive or impulsive? Compulsive and impulsive behaviours refer to classical psychiatric terminology. Dermatologists can benefit from a psychiatric framework for efficiently classifying and managing these patients. The Task Force considers this framework a necessary prerequisite to the proposed classification. Examples of questions that dermatologists can ask their patients to differentiate compulsive behaviours from impulsive ones underlying SISL will be given below. In order to understand this psychiatric framework it is important to start with a definition of compulsive and impulsive behaviours vs. disorders.

*Psychopathological terminology*

*Compulsive behaviour* is defined as repeated behaviour, often associated with an obsessive ideation component (see the definition of OCD below), occurring many times daily, leading to time wasting, interpersonal problems, social impairment and/or potential self-harm (for instance, in the form of skin damage); any attempts to control the urge cause increased psychological tension, the tension triggers the compulsive act, which in turn brings some relief to the patient.

*Impulsive behaviour* consists of isolated or recurrent, but generally not repetitive, acts of uncontrolled aggression of the self and/or others, most commonly without

Hidden or denied underlying behaviour		Non-hidden and non-denied underlying behaviour		
External incentives	No external incentives	Skin picking and related skin damaging syndromes		Body modifying (generally non-pathological) behaviour
Malingering in dermatology	Factitious disorders in dermatology	Compulsive spectrum	Impulsive spectrum	
Pathomimicry		Acne excoriée	Cutting	Tattoos Piercing Complications of esthetic treatment
		Trichotillomania Onychophagia	Burning Hitting Scarifications	
	Münchhausen's syndrome			

Fig. 1. General classification of self-inflicted lesions in dermatology.

an obsessive component, and rapid but short relief from a variety of intolerable states<sup>3</sup>.

**Obsessive compulsive disorder.** A classically chronic and debilitating syndrome, categorized in the DSM-IV-TR as an anxiety disorder, consisting of recurrent obsessions (i.e. intrusive thoughts, contributing to escalating anxiety), and recurrent compulsions (i.e. mental acts or ritualistic behaviour performed in an effort to reduce anxiety) (19). Patients perceive obsessions as “ego-dystonic”, alien to them, and at the same time they are criticized and seen as irrational or ridiculous. OCD symptoms are time consuming and contribute to psychosocial impairment and significant distress. Dermatologists often see the cutaneous consequences of typical OCD symptoms, such as repetitive and frequent hand washing, although these are not correctly classified as “SISL”.

**Impulse control disorders (ICD).** These disorders are characterized as a difficulty to resist an impulsive act or behaviour that may be harmful to the self or to others. In accordance with the degree of anticipation and effort to control an act or behaviour, the latter can be divided into compulsive and impulsive types<sup>4</sup>.

<sup>3</sup>Examples of questions to help determine patient’s type of behaviour: “Before acting on your skin, do you try to stop yourself from doing it, (*compulsive behaviour*) or does it all happen very quickly without you even being able to think (*impulsive behaviour*)?” or “Do you feel an increasing tension when you try to control the urge to act on your skin (or your hair) and does your action produce a relief of the tension (*compulsive behaviour*)?” or “Would you say that when you have taken it out on your skin, you feel relieved for some time (*impulsive behaviour*) or do you soon feel the need to do it again (*compulsive behaviour*)?” “Does hurting (or damaging) your skin occur automatically, without being able to control yourself (*impulsive behaviour*)?” or “Do your actions on your skin (or your hair), or when you observe your skin in front of your mirror, generate a feeling of waste of time (*compulsive behaviour*)?”

<sup>4</sup>a) *ICD – Compulsive type*, such as restrictive eating in anorexia nervosa, binge eating, pathological gambling, compulsive buying, sexual compulsions, kleptomania, and several skin picking syndromes (see below). In all these disorders there is an effort to resist the repetitive act or behaviour. The accumulated tension decreases when the repressed act or behaviour finally occurs.

b) *ICD – Impulsive type*, such as impulsive aggression towards others or impulsive self-injury – without the intention to die – and several other impulsive self-inflicted skin lesions, such as scarification. Impulsive behaviour is one of the core elements of borderline personality disorder. In all these disorders there is no effort to resist the generally violent act or behaviour that occurs as a short cut when psychological tension or the sensation of frustration is unbearable. Dermatologists should be aware of the fact that compulsive and impulsive behaviours are included in the larger category of impulse control disorders.

<sup>5</sup>1) A group of abnormal preoccupations concerning body appearance or sensations: Hypochondria and body dysmorphic disorder (BDD), generally classified (DSM-IV-TR (15)) as “somatoform disorders”; Depersonalization, generally classified as “dissociative disorders”; and anorexia nervosa, generally classified as “eating disorders”. This group is quite frequent in clinical dermatological practice. Spending hours in front of the mirror is a classical sign of BDD and is often associated with acne excoriée (see text).

2) A group of impulse control disorders (see above);

3) A group of “neurological” disorders including symptoms of repetitive and/or stereotyped behaviour: Tourette’s syndrome (with chronic motor and vocal tics) and even autism.

**Obsessive compulsive spectrum disorders (OCSD).** Hollander et al. (20) and Ravindran et al. (21), among others, have recently argued that OCD symptoms should be considered as part of a cluster of “OCSDs”. In addition to classical OCDs, this broader spectrum would encompass 3 different groups<sup>5</sup>.

#### *Syndromes associated with a denied or hidden pathological behaviour*

**Malingering.** This term indicates the production or feigning of a symptom due to social (e.g. financial) incentives. Malingering can concern any medical specialty. In dermatology, patients may intentionally aggravate symptoms of pre-existing skin diseases or originate skin lesions de novo. A pre-existing skin disorder is likely to be a risk factor for malingering (22). Falsification of medical records may also occur. Some typical examples are self-inflicted wounds by soldiers, manipulation of prurigo papules or excoriations from atopic dermatitis with steel brushes in order to stay at home and avoid school examinations.

Malingering has to be differentiated from more or less deliberate non-adherence with medical prescriptions, leading to the persistence or aggravation of a disease and/or to (re)admission to a hospital. Most cases of poor medical compliance are not hidden from the doctors, provided that non-adherence is explored in an empathetic way, without making the patient feel guilty. Nevertheless, some cases of hidden non-adherence can be supported by social incentives and therefore share some characteristics with malingering; for example, a patient neglecting leg ulcers in order to stay in hospital during winter and save money on heating at home.

**Factitious disorders.** This expression refers to artificial or faked, self-provoked or alleged diseases, without clear external incentives, in the fields of internal medicine, psychiatry and all somatic specialties (23–26); for example, taking anticoagulants to provoke internal bleeding or thyroid hormones for simulating hyperthyroidism.

It should be noted that an “external” trigger can precipitate, through emotional stress, the creation of the lesions, but despite such an apparent interpersonal and recent precipitating factor, the main contribution to the genesis has to be found in internal, mainly unconscious, determinants. Child physical, sexual or psychological abuse or neglect is quite frequent in the history of these patients. Dermatology is especially concerned with factitious disorders, due to the easy access to the skin. In dermatology, factitious disorders are defined as the induction of skin lesions by the patient; this induction is kept secret until an appropriate relationship with a caregiver is established. The main motivation is assumed to be a method for coping with a severe psychological background and a preference for the

sick role with no immediate tangible benefits (27). The underlying psychological mechanisms are complex and the diagnostic distinction from a possible underlying primary psychiatric disorder may sometimes be blurred. In clinical management, a factitious disorder can be understood as an indirect “cry for help” with regards to the psychological situation (28–31). For example, in a first dermatological consultation, the patient presents lesions, of unclear origin, on the forearm after a separation life event. There are no aspects of a normal dermatological condition.

As with malingering, factitious disorders can complicate and aggravate pre-existing lesions, for example, lesions due to a genuine cutaneous disease. Several factitious symptoms can be combined, making diagnosis more difficult. Hidden non-adherence can also play a role in some factitious disorders, for example, uncontrollable hypertension, despite multiple and sustained antihypertensive prescriptions.

Gardner-Diamond-syndrome (“painful ecchymosis syndrome”, “psychogenic purpura” or “painful bruising syndrome”) was originally attributed to an autoimmune mechanism (“auto-erythrocyte sensitization syndrome”), but has now been classified as a factitious disorder (32, 33).

The artificial nature of the lesions in factitious disorders is a main criterion for their diagnosis; however, the use of this term is only recommended when the behaviour underlying a self-inflicted skin lesion is denied or hidden. Obviously, skin lesions, including those caused by non-denied or non-hidden underlying behaviour, are artificial, i.e. non-natural in origin, but the underlying psychopathological mechanisms and the therapeutic approach are consistently different in each of these large categories of disorders.

*Pathomimicry.* The term “pathomimicry” has been used in a range of factitious disorders, referring to the resemblance between some artificially provoked or alleged diseases and some genuine, natural diseases. In the dermatological context, this term can be used to signify the induction of lesions mimicking features of a recognized dermatological disorder (34), for example, atopic dermatitis-like lesions produced by contact with an irritating agent. Malingering may also underlie pathomimicry.

*Münchausen’s syndrome.* Asher (35) coined this eponym with reference to the character of Karl Friedrich Hieronymus, Baron Münchausen (1720–1797), a man who travelled widely and was renowned for telling fantastic and exaggerated stories about his life. This syndrome, belonging to the factitious disorder category, is defined as the triad of: (i) Factitious symptoms; (ii) Hospital or doctor shopping; and (iii) Pseudologia phantastica.

Patients with Münchausen syndrome present, or claim, acute symptoms with demonstrative dramatic

descriptions of complaints and false information on their medical history. It is also common for these patients to have a history of multiple hospitalizations and surgical procedures, sometimes with visible multiple sequels (36). Self-harm is delegated to the care providers; an example would be a patient presenting pain and clinically invisible impairment on his skin and repeatedly asking for skin biopsies.

SISL due to hidden causal behaviour can be combined with surgical scars and iatrogenic complications of various excessive medical procedures. Although the term “Münchausen’s syndrome” was abandoned in the 4<sup>th</sup> edition of the Diagnostic and Statistic Manual of the American Psychiatric Association (DSM-IV-TR) (15), its interest lies in drawing attention to the frequency of indirect, delegated self-harm, among patients with factitious disorders.

*Münchausen’s syndrome by proxy.* In Münchausen’s syndrome by proxy, it is mainly children who are harmed by their caregivers in order to establish contact with health professionals. The Münchausen’s syndrome by proxy is a particular form of child abuse and falls outside the scope of this paper – the skin lesions that can be presented by these children are not “self-inflicted”, but inflicted by an adult abusing the children and keeping his/her behaviour secret (37).

*Simulation.* This term is generally restricted to those cases of malingering or factitious disorders that simulate or mimic a known disease: general or dermatological (see the definition of pathomimicry above).

#### *Syndromes associated with a non-denied and non-hidden pathological behaviour*

*Compulsive skin picking and related skin damaging syndromes* are defined as repetitive, sometimes ritualistic behaviours, occurring at regular intervals during the day for a sustained period of time (at least 6 weeks) and leading to damage of the skin or its appendages (38, 39). Patients feel the urge to act and find relief in the activity. Attempts to control the urge cause tension to rise. A list of compulsive skin picking and related skin damaging syndromes is given in Table II.

Although the induction of the lesions is not denied, the patient does not always spontaneously admit it. Some patients address the skin picking behaviour without inhibition whilst others openly recognize the problem when questioned by their doctor. The behaviour is generally related to relief of tension and can sometimes be pleasurable. Most patients experience urges to pick the skin, which is reported as intrusive. Even if there is an underlying skin disease, the symptoms cannot account for the severity of the lesions. Patients may claim an underlying itch, which can complicate the diagnosis; for example, a young girl with mild acne presenting excoriations and scars and

Table II. Compulsive skin-picking and related skin damaging syndromes

Syndrome	Characteristics
Pathological skin picking (or dermatillomania)	Scratching, picking, rubbing or squeezing and pressing of skin with normal, or near normal, appearance, usually with the finger nails or sharp instruments.
Acne excoriée	Skin picking of the face, with minimal acne and significant scarring.
Pathological nose picking (or rhinotillexomania)	Compulsive extraction of dried nasal mucus or foreign bodies from the nose with a finger or squeezing comedones.
Trichotillomania	Pulling out the hair, potentially resulting in marked hair loss; the most extensively investigated skin picking syndrome and the only syndrome that is diagnostically classified as a discrete disorder in DSM-IV-TR.
Trichoteiromania	Physical damage to the hair by rubbing and scratching the scalp.
Trichotemnomania	Compulsive haircutting.
Onychophagia	Nail biting syndrome.
Onychotemnomania	Cutting nails too short leading to traumatization of the nail body or nail fold.
Onychotillomania	Trauma of the paronychium or constant manipulation, picking, and removal of the cuticle and/or nail.
Morsicatio buccarum	Benign, sharply demarcated, usually leukodermic, lesions around the tooth base and buccal mucosa, resulting from repeated sucking and chewing on the oral mucosa.
Self-inflicted Cheilitis	Compulsive licking, nose picking.
Pseudo-knuckle pads	Rubbing, massaging, chewing, sucking the finger joints.

DSM-IV-TR: 4<sup>th</sup> edition of the Diagnostic and Statistic Manual of the American Psychiatric Association (15).

claiming that her personal problems force her to skin pick in front of the mirror.

General practitioners, mental health professionals and dermatologists are involved in the management of a subgroup only, and not in the management of the whole population of these patients with “pathological” skin-picking syndromes. Some of these patients are reluctant to seek medical advice or help, as they feel ashamed that they are responsible for provoking or aggravating the lesions, even though the responsibility is neither denied nor hidden from the health professional when the question is considered sensitively.

In addition to pathological skin picking syndromes, dermatologists should remember that there is a large group of episodic or repetitive skin manipulations that are not pathological and do not lead to any skin lesions. These behaviours are classified as “body focused” or “grooming” behaviours (see below). Nevertheless, the distinction between non-pathological and pathological skin picking is not always clear, and this is especially the case with children or in the initial stages of syndromes such as trichotillomania (see definition below).

*Grooming behaviour.* Personal and social grooming behaviours have been described in animals. Personal or “auto-grooming” is repetitive behaviour that promotes hygiene. In animals this helps to keep their fur, feathers, scales or other skin coverings in good condition. Social or “allogrooming” is a major social activity, especially in primates; it establishes and maintains bonds and even resolves interpersonal conflictive situations. *Auto-grooming* has also been seen in animals when they are in stressful situations. Different kinds of personal grooming exist in humans and have been considered as the phylogenetic basis of trichotillomania (see below).

*Dermatillomania* is synonymous of pathological skin picking, even though this term is used much less nowadays.

*Acne excoriée* is a subtype of pathological skin picking with lesions generally limited to the face. Bodily

focused anxiety or even BDD can be associated and participate in the pathophysiology of acne excoriée.

*Rhinotillexomania* (pathological nose picking) is the consequence of a common and benign habit in children and adults when it becomes time-consuming, socially compromising or physically harmful (for example, perforation of the nasal septum) (40).

*Trichotillomania* (compulsive hair pulling) is the most common pathological skin-picking syndrome of all the compulsive skin picking syndromes. Trichotillomania can initially appear to be a purely behavioural symptom, with no subsequent hair loss and no visible skin lesion (41–43). In some cases of trichotillomania there is a lack of the obsessive-compulsive component involved in hair pulling, leading some authors to suggest the existence of an impulsive subtype of trichotillomania.

*Trichophagia* (eating the hair that has been pulled out) and the consequent trichobezoar (the formation of a mass of ingested hair trapped in the gastro-intestinal tract, potentially leading to a sub-occlusive syndrome) are not primarily skin picking syndromes, but secondary consequences of hair pulling.

*Trichoteiromania* is a syndrome similar to trichotillomania, but much less frequent, consisting of compulsive rubbing of hair, which can lead to hair loss (44).

*Trichotemnomania* is a compulsive habit of cutting or shaving the hair. It should not be confused with trichotillomania; it is much less frequent than the latter. This diagnosis should be considered when a supposed alopecia areata looks somewhat unusual (45).

*Onychophagia* is a compulsive habit of nail biting. It becomes pathological when time-consuming or leading to aesthetic damage and social avoidance. Skin damage is constant and can be severe in *onychotemnomania* (cutting the nails too short) and in *onychotillomania* (picking of the cuticle or even removal of the nail).

*Morsicatio buccarum* is excessive cheek or lip biting, leading to oral hyperkeratosis. A frequent, but well-tolerated, compulsive habit generally discovered during dental surgery or in a dermatology examination.

*Cheilitis factitia*. A habit that consists of lip licking that can potentially lead to skin damage and eczematous lesions. As explained above, the term “factitia” is somewhat confusing here, given that the habit underlying these lesions is neither denied, nor kept secret by the patient. The expression self-inflicted cheilitis is thus preferable.

*Pseudo-knuckle pads* are swellings caused by rubbing, massaging, chewing, or sucking, usually found on the finger joints.

*Impulsive skin picking and related skin damaging syndromes* are defined as acts of uncontrolled aggression to the skin. These behaviours frequently offer rapid, but short-lived, relief from a variety of intolerable con-

ditions, providing vital support for the patient, aiding their psychological survival, albeit in a pathological state (46). Typical examples would be skin cutting, skin burning, or self-hitting in adolescents presenting symptoms of borderline personality disorders. Patients presenting with these lesions are generally seen by mental health professionals, yet dermatologists are sometimes consulted too.

*Terms and expressions to be avoided or to exclude from the category of self-inflicted skin lesions*

*Dermatitis artefacta, factitial dermatitis or dermatitis factitia* are common terms in dermatology and are often synonymously referred to as factitious disorders (47). The authors of this paper recommend the avoidance of both these terms and their replacement by the term “factitious disorders in dermatology”, since dermatitis suggests underlying inflammation.

*Dermatitis para-artefacta* has also been used as a synonym for skin picking syndromes (2). For the same reasons as mentioned above, the authors recommend avoiding this expression and maintaining the use of the terms Compulsive skin-picking and related Skin damaging syndromes.

*Neurotic excoriations* should be considered as obsolete, as they may lead to the stigmatization of patients as neurotic (48). The expression psychogenic excoriation avoids the theoretical reference to neurosis; nevertheless, the expression Skin-picking syndromes, which refers to the same clinical state, is preferable.

*Hypochondriasis circumscripta* is an expression used by Russian specialists to define a delusional state in which auto-destructive skin-directed behaviour is secondary to pathological cutaneous sensations (somatic delusions, tactile illusions or idiopathic pain) (49). As mentioned previously, under the definition of SISL, these clinical presentations, together with that of delusional infestation, should be excluded from the category of SISL, in the strict sense of the term.

A flow chart is proposed in Fig. 2 for dermatologists’ clinical management of SISL.

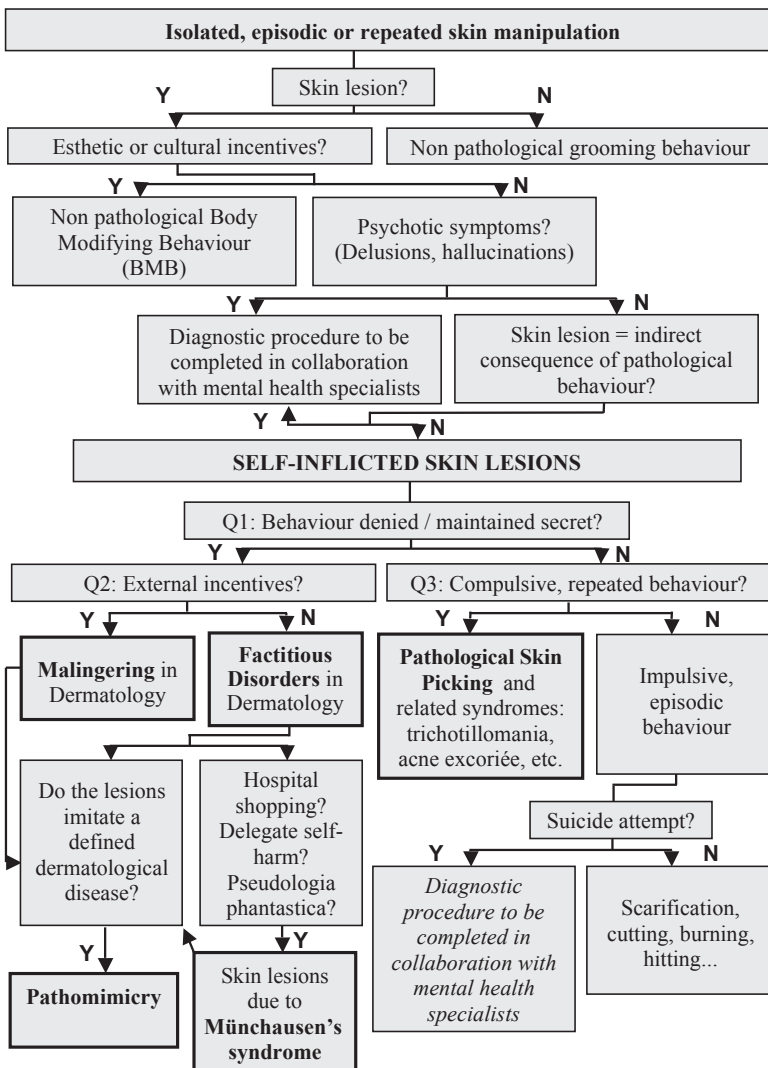


Fig. 2. Flow chart for the clinical management of self-inflicted skin lesions. Q1, Q2, Q3: questions 1–3.

CONCLUDING REMARKS

The lack of consistency in the terminology and diagnostic classification of SISL highlights the need for a more coherent and nosologically oriented classification. The classification system of SISL proposed

in this paper takes into account the aetiology behind the visible skin lesions with regards to different psychological situations, such as factitious disorders or malingering. Furthermore, it divides the overlarge group of “non-secret” SISL, classified as “skin picking syndromes” into 2 groups, in accordance with the nature of the underlying (compulsive or impulsive) behaviour. This classification, summarized in Fig. 1, is aimed at helping clinicians and scientists recognize as kindred symptoms those that may have previously been considered as “distant”.

There are some limitations to the new classification system proposed: it was developed through a process of consensus involving a group of specialists from 2 disciplines – dermatology and mental health – but there was no quantitative assessment. For example, the distribution of these recommendations or questionnaires to a large community of specialists, for testing the usefulness of our flow chart in a large cohort of patients was not undertaken.

Based on current experience, the flow chart shown in Fig. 2 is presented as an analytical framework for dermatologists who treat patients with self-inflicted lesions.

A clearer classification approach and a unified terminology could facilitate dermatologists’ daily clinical work and interdisciplinary communication between different healthcare professionals involved in the management of these patients, as well as lead to further research into the epidemiology, aetiology and treatment of these syndromes.

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## REFERENCES

1. Fliege H, Grimm A, Eckhardt-Henn A, Gieler U, Martin K, Klapp BF. Frequency of ICD-10 factitious disorder: survey of senior hospital consultants and physicians in private practice. *Psychosomatics* 2007; 48: 60–64.
2. Harth W, Taube KM, Gieler U. Factitious disorders in dermatology. *J Dtsch Dermatol Ges* 2010; 8: 361–373.
3. Cumming S, Covic T, Murrell E. Deliberate self-harm: have we scratched the surface? *Behaviour Change* 2006; 23: 186–199.
4. Koblenzer C. Dermatitis artefacta. Clinical features and approaches to treatment. *Am J Clin Dermatol* 2000; 1: 47–55.
5. Nielsen K, Jeppesen M, Simmelgaard L, Rasmussen M, Thestrup-Pedersen K. Self-inflicted skin diseases. A retrospective analysis of 57 patients with dermatitis artefacta seen in a dermatology department. *Acta Derm Venereol* 2005; 85: 512–515.
6. Kocalevent RD, Fliege H, Rose M, Walter M, Danzer G, Klapp BF. Autodestructive syndromes. *Psychother Psychosom* 2005; 74: 202–211.
7. Klonsky ED, Moyer A. Childhood sexual abuse and non-suicidal self-injury: meta-analysis. *Br J Psychiatry* 2008; 192: 166–170.
8. van Moffaert M. The spectrum of dermatological self mutilation and self destruction including dermatitis artefacta and neurotic excoriations. In: Koo J, Lee CS, editors. *Psychocutaneous medicine*. New York: Marcel Dekker Inc., 2003: p. 169–189.
9. Gupta MA, Gupta AK, Haberman HF. Neurotic excoriations: a review and some new perspectives. *Compr Psychiatry* 1986; 27: 381–386.
10. Fruensgaard K. Psychotherapeutic strategy and neurotic excoriations. *Int J Dermatol* 1991; 20: 198–203.
11. Arnold LM, Auchenbach MB, McElroy SL. Psychogenic excoriation. Clinical features, proposed diagnostic criteria, epidemiology and approaches to treatment. *CNS Drugs* 2001; 15: 351–359.
12. Gieler U, Effendy I, Stangier U. [Cutaneous artefacts – possibilities for treatment and their limits.] *Z Hautkr* 1987; 62: 882–890 (in German).
13. Gieler U. Factitious disorders in the field of dermatology. *Psychother Psychosom* 1994; 62: 48–55.
14. International Classification of Diseases, Tenth Revision (ICD-10). <http://www.who.int/classification/icd>. Geneva, 2010.
15. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. Fourth edition. Text revision (DSM-IV-TR). Washington, DC: American Psychiatric Press, 2000.
16. Xenitidis K, Campbell C. Self-harm during first-episode psychosis – correspondence. *Br J Psychiatry* 2008; 193: 167–169.
17. Harvey SB, Dean K, Morgan C, Walsh E, Demjaha A, Dazzan P, et al. Self-harm in first-episode psychosis. *Br J Psychiatry* 2008; 192: 178–184.
18. Freudenmann RW, Lepping P. Delusional infestation. *Clin Microbiol Rev* 2009; 22: 690–732.
19. Warnock JK, Kestenbaum T. Obsessive-compulsive disorder. *Dermatol Clin* 1996; 14: 465–472.
20. Hollander E, Kim S, Khanna S, Pallanti S. Obsessive-compulsive disorder and obsessive-compulsive spectrum disorders: diagnostic and dimensional issues. *CNS Spectr* 2007; 12: 5–13.
21. Ravindran AV, da Silva TL, Ravindran LN, Richter MA, Rector NA. Obsessive-compulsive spectrum disorders: a review of the evidence-based treatments. *Can J Psychiatry* 2009; 54: 331–343.
22. Drinker H, Knorr NJ, Edgerton MT Jr. Factitious wounds. A psychiatric and surgical dilemma. *Plast Reconstr Surg* 1972; 50: 458–461.
23. Eisendrath SJ. Factitious physical disorders: treatment without confrontation. *Psychosomatics* 1989; 30: 383–387.
24. Eckhardt A. Factitious disorders in the field of neurology and psychiatry. *Psychother Psychosom* 1994; 62: 56–62.
25. Feldman MD, Hamilton JC, Deemer HA. Factitious disorder. In: Philipps KA, editor. *Somatoform and factitious disorders*. Review of psychiatry. Vol. 20. Washington, DC: American Psychiatric Press, 2001: p. 129–159.
26. Eisendrath SJ, McNeil D. Factitious physical disorders, litigation, and mortality. *Psychosomatics* 2005; 45: 350–353.
27. Krahn L, Li H, O’Connor M. Patients who strive to be ill: factitious disorder with physical symptoms. *Am J Psychiatry* 2003; 160: 1163–1168.
28. Janus L. Personality structure and psychodynamics in dermatological artefacts. *Z Psychosom Med Psychoanal* 1972; 18: 21–28.
29. Consoli SG. Dermatitis artefacta: a general review. *Eur J Dermatol* 1995; 5: 5–11.
30. Consoli SG. The case of a young woman with dermatitis artefacta: the course of the analysis. *Dermatol Psychosom* 2001; 2: 26–32.
31. Gieler U, Eckhardt-Henn A. Factitious disorders. *Dermatol Psychosom* 2004; 5: 93–98.
32. Behrendt C, Goos M, Thiel H, Hengge UR. [Painful bruising syndrome.] *Hautarzt* 2001; 52: 634–637 (in German).



33. Ivanov OL, Lvov AN, Michenko AV, Künzel J, Mayser P, Gieler U. Autoerythrocyte sensitization syndrome (Gardner–Diamond syndrome): review of the literature. *J Eur Acad Dermatol Venereol* 2009; 23: 499–504.
34. Millard LG. Dermatological pathomimicry: a form of patient maladjustment. *Lancet* 1984; 2: 969–971.
35. Asher R. Munchausen’s syndrome. *Lancet* 1951; 1: 339–341.
36. Robertson MM, Cervilla JA. Munchausen’s syndrome. *Br J Hosp Med* 1997; 58: 308–312.
37. Thomas K. Munchausen syndrome by proxy: identification and diagnosis. *J Pediatr Nurs* 2003; 18: 174–180.
38. Grant JE, Odlaug BL, Kim SW. A clinical comparison of pathologic skin picking and obsessive-compulsive disorder. *Compr Psychiatry* 2010; 51: 347–352.
39. Odlaug BL, Grant JE. Pathologic skin picking. *Am J Drug Alcohol Abuse* 2010; 36: 296–303.
40. Jefferson JW, Thompson TD. Rhinotillexomania: psychiatric disorder or habit? *J Clin Psychiatry* 1995; 56: 56–59.
41. Lochner C, Seedat S, du Toit PL, Nel DG, Niehaus DJ, Sandler R, et al. Obsessive-compulsive disorder and trichotillomania: a phenomenological comparison *BMC Psychiatry* 2005; 13; 5: 2.
42. Chamberlain SR, Menzies L, Sahakian BJ, Fineberg NA. Lifting the veil on trichotillomania. *Am J Psychiatry* 2007; 164: 568–574.
43. Duke DC, Keeley ML, Geffken GR, Storch EA. Trichotillomania: a current review. *Clin Psychol Rev* 2010; 30: 181–193.
44. Freyschmidt-Paul P, Hoffmann R, Happler R. Trichoteiromania. *Eur J Dermatol* 2001; 11: 369–371.
45. Happler R. Trichotemnomania: obsessive-compulsive habit of cutting or shaving the hair. *J Am Acad Dermatol* 2005; 52: 157–159.
46. Young R, van Beinum M, Sweeting H, West P. Young people who self-harm. *Br J Psychiatry* 2007; 191: 44–49.
47. Fabisch W. Psychiatric aspects of dermatitis artefacta. *Br J Dermatol* 1980; 102: 29–34.
48. Cyr PR, Dreher GK. Neurotic excoriations. *Am Fam Physician* 2001; 64: 1981–1984.
49. Smulevich AB, Lvov AN, Ivanov OL. Self-inflicted disorders: psychopathology of autoaggression in dermatological practice. Moscow: MIA Edit., 2012.