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Approaching Treatment for Psychodermatology

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I. INTRODUCTION

Psychodermatology is a sub-specialty of dermatology, where patients present: 1) primary psychiatric condition, which they go to dermatologists; 2) primary dermatological disease with psychological or psychiatric comorbidities; 3) dermatoses that influence the psychological state, maintaining or aggravating it¹. The relationship of mental pathologies and dermatological diseases: it is bidirectional, being necessary to break this cycle to treat patients². Because it involves the skin, the nervous system and the mind, psychodermatology needs the collaboration and integration of the dermatologist, with the psychologist and the psychiatrist; otherwise, psychodermatoses will not be treated in its complexity¹. Dermatologists should be able to know several non-pharmacological treatments, initiate basic pharmacotherapy and recognize the correct time to refer patients to the psychiatrist³. They also need to approach the patient, which is obtained when considering dermatosis from the perspective of those who experience the disease¹, so the dermatologist, in the consultation must be empathetic, meet the patient's expectations and be optimistic, aspects of the encounter clinical conditions that can foster a positive therapeutic relationship². For treatment, you should always start using stress reduction techniques, the main causative agent of diseases¹.

The main objective is to know the different therapies we have to treat psychocutaneous pathologies.

II. DEVELOPMENT OF THE TOPIC

Most diseases are *multifactorial*: Biological, psychological, emotional, social and spiritual factors, add to previous situations, from conception, pregnancy, birth to the presentation of the disease, whose effects accumulate in the body: these circumstances exert a unique role for each person, which will trigger a disease, whose presentation will be particular for each patient¹.

Established as a subspecialty of dermatology, Psychodermatology studies the bidirectional relationship, in which psycho-psychiatric disorders cause skin diseases and skin diseases cause psychiatric disorders². In dermatology, what affects the skin is visible to both people and the same patient, damaging the physical appearance, compromising the patient's image and achieving self-esteem, producing unpleasant physical sensations that unbalance the person, creating discomfort, irritation and impatience; sometimes triggered, various mental states, such as depression, anxiety and distortion of body image¹. In this scenario, we emphasize the idea that a dermatologist should be prepared to diagnose, provide appropriate psychological support and treat his patients³. A good doctor-patient relationship is the key to success⁴.

III. STRESS

The skin is particularly affected by stress and it is important to take into account the role it plays in the generation, maintenance or aggravation of dermatosis¹. Stress is defined as the set of physiological responses and adaptations that occur in the body every time a threat is perceived, real or imaginary, affecting physical, mental and emotional balance⁵. Stressful thoughts are varied, because they depend on the interpretation that each person gives to what happens in their mind; many can be imagined or happening, so fantasy and reality produce the same biochemical states and emotions in the body; thoughts, therefore, affect the skin by chemical mediators brought to the skin¹. The hypothalamic pituitary axis (HPA) responds to psychological stress, with increased stress hormones (releasing corticotropin hormone, adrenocorticotropin, cortisol and prolactin); activating the sympathetic nervous system, which raises the levels of catecholamines and increases neuropeptides and neuromediators, such as, substance P and calcitonin gene structure peptide (CGRP); mastocytic skin cells are an important target of stress hormones and

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mediators and their activation leads to immune dysregulation, neurogenic inflammation, proinflammatory response and vasodilation; producing various skin diseases, inflammatory, autoimmune and allergic⁴, in addition to aging^{6,7}.

IV. PSYCHODERMATOSIS

Psychodermatoses are changes in the skin that:

1. Are caused by psychiatric problems;
2. Cause psychiatric or psychological disorders due to their clinical manifestation;
3. They influence the psychological state and are maintained or aggravated by this¹.

They are divided into four types:¹

- *Self-inflicted dermatoses*: artificial dermatitis, epidermotilomania, excoriated acne, artificial cheilitis, onychophagy, Gardner-Diamond syndrome.
- *Dermatosis due to illusions and hallucinations*: delusions of parasitosis; olfactory, tactile and body hallucination; hypochondriac illusions; body dysmorphic disorder
- *Somatomorphic disorders*: pruritus, allergies, glossloss, vulvodynia, trichodynia, paraesthesia.
- *Dermatosis by compulsion*: eczema of hands by repeated washing, chronic lichen simplex, trichotillomania, psychogenic excoriations, cutaneous hypochondria, dysmorphic disorder of the body.

The manifestations of group 1 are the mirror of what happens in the patient's mind, it is not possible to effectively attend to patients, without acting on mental disorders¹.

In the dermatoses of the second group, the mind is secondarily affected by skin diseases; they are stigmatizing, anti-aesthetic, diseases that cause intense or prolonged symptoms of stress, irritability, fear, shame, catastrophic prediction, anxiety, depression, anger, self rejection, isolation, discouragement and fatigue¹. In this group, psoriasis, vitiligo, atopic dermatitis, alopecia areata and hidradenitis are the most common²; other dermatoses with less intense effects are acne, dyshidrosis, hyperhidrosis of the hands, feet and armpits, leprosy, herpes simplex, hypertrichosis, lichen planus, perioral dermatitis, rosacea, seborrheic dermatitis, scleroderma, lupus erythematosus, pemphigus, leg ulcers and dermatoses with a devastating effect on the psyche are ichthyosis, epidermolysis, hemangiomas and any other dermatosis interpreted as disastrous or harmful for a particular patient¹.

In the third group, dermatoses that affect the psyche as they affect the clinical picture, cause its maintenance or aggravation and facilitation of the cure or resistance to treatment; many are part of the second

group to which allergies and serious diseases such as neoplasms are added¹, some of them when treating psychological imbalance or psychiatric illness and remitting them, are potentially cured, because the origin of the disease is being treated.

V. INTERDISCIPLINARY CARE

Given the permanent interaction of the mind and the skin, it is necessary that the patient be treated as a unit consisting of several levels, which correspond to cutaneous, emotional and mental aspects; it is necessary to use the resources available by Dermatology, as well as those that are in the domain of other areas that participate in these diseases, how, psychology and psychiatry². First, it is necessary for the dermatologist to acquire skills that go beyond the diagnosis and management of skin diseases; specialist who understands that the patient's emotional complaints are part of the clinical picture and has the ability to explore them and provide some type of support to the affected patients may be more effective in their treatment¹. In many cases, dermatoses are followed by an inability to control emotions that require a systematic and specialized correction for which the dermatologist would have no preparation or time; thus the dermatologist can obtain the basic preparation to explore and attend to the emotional states of the patient, giving him/her, through amical language and appropriate questions, conditions to see the real dimension of the problem and provide management options¹. Often, a welcoming attitude of the doctor is the first step, to treat and facilitate the cure of the patient². However, a complete systematic work requires the participation of a psychologist, preferably someone interested in dermatological problems¹. And in the psychodermatoses of the first group, which involve psychopathology, the participation of a psychiatrist is essential for the precise diagnosis of the underlying disorder and follow-up with specific medications, which require depth of knowledge, daily experience in the control of the underlying pathology and possible undesirable adverse events; despite this, it is necessary for the dermatologist to have basic knowledge of psychopharmacology and psychoactive drug management to attend to simpler cases⁸ or those in which the patient takes a while to accept that he or she needs help from the psychiatrist.

VI. INTEGRATED THERAPEUTIC RESOURCES

Considering the participation of emotions and the mind, it is necessary to integrate all the resources that these areas may involve¹. Basically, the dermatologist will pay attention to the cutaneous condition, seeking to correct the dermal pathology; however, it is important to master the mind-body anti-stress techniques; they are natural attitudes that,

surprisingly, are not taught and therefore are not followed by patients or doctors and can keep stress at a non-harmful level at no cost; these techniques can be applied during the consultation and the doctor must instruct the patients to practice them routinely to maintain their physical and mental balance, the fundamental ones are four: upright posture, change of respiratory pattern, muscle relaxation and meditation; All have proven efficacy to reduce stress and promote body balance¹. Simple conscious breathing is changed from the thoracic to the abdominal pattern, producing important changes in the organism in the sense of physiological and psychological balance⁹. Remembering or teaching patients to say what we think and feel, properly, helps us to let off steam and relax; The concept of Alexithymia, is characterized by the inability to identify and express their emotions, several studies have reported a high incidence of alexithymia in patients with alopecia areata (58%)¹⁰, psoriasis (35%)¹¹, chronic urticaria (50%)¹² and vitiligo (35.5%)¹³. It would also be necessary to perform an activity that the patient enjoys, which will contribute to his muscle relaxation; how to dance, paint, exercise, travel, play a musical organ, learn a language, etc: an activity that brings a smile to the patient; we must consider that each person is unique, so the activity you choose will also be special for each patient. Transcendental meditation is a meditation technique, associated with yoga, tantra, Tibetan Buddhism and Zen Buddhism; produces neurochemical, neurophysiological and cognitive behavioral effects in its practitioners, significant and positive; Among the main effects is the decrease in anxiety and stress (due to the decrease in cortisol and norepinephrine levels), increasing the feeling of pleasure and well-being (due to an increase in the synthesis and release of dopamine and serotonin) ¹⁴.

Intervention with psychoactive drugs is used in cases with marked mental changes such as personality disorder, bipolar disorder, narcissistic personality disorder, depressive disorders, anxiety disorders, posttraumatic stress disorder, schizophrenia, obsessive compulsive disorder, should be performed by a psychiatrist in consultation with Dermatology because it involves another area of Medicine¹⁵.

Almost all skin diseases are capable, to a lesser or greater degree, of emotionally affecting patients; Today there is the concept that in certain diseases, the involvement may be minimal and we should refer the patient to a psychologist, as if the mind were the exclusive cause of the disease, which, once treated, will lead to a cure; This aspect deserves careful consideration by the specialist because the patient often treats the problem perfectly well without emotionally affecting it; but for some people, the degree of emotional deterioration is so complex that it becomes imperative to refer the patient to psychotherapy¹. So in some cases, a prudent period must be expected, for the

patient to use their own stress management techniques and not to balance, refer to the psychologist or psychiatrist, as appropriate. With regard to psychotherapies, there are several types and each person adapts to one, the most commonly used is cognitive behavioral therapy, which is recognized as effective in many cases¹⁶. Other techniques include transactional analysis, bioenergetic analysis, gestalt therapy, psychodrama and reprogramming techniques such as neurolinguistic programming, timeline therapy, EMDR (desensitization and reprocessing of eye movement) and energy techniques such as TFT (Field of thought therapy) and EFT (Emotional Freedom Techniques); although the mode of action of some of them is not perfectly clear, it is necessary to maintain the integrative concept; There are reports of positive effects with these techniques in individual cases or in large numbers of people¹. Other resources, well known and used, are biofeedback, guided imagery, visualization and support groups^{17,18}. Hypnosis is a technique with proven effects on the brain and capable of producing unexpected results, in addition to being usable in a large number of dermatoses¹⁹, such as trichotillomania, where hypnotic suggestions are used that cause pain when touching the scalp or tearing the hair²⁰. There is also self hypnosis and self massage, which are techniques of self application, as well as yoga and tai chi chuan, originally from India and China, the first being a philosophy of life, which integrates mind and body, and the second originated in the martial arts, producing energizing effects on the body¹.

It is important to remember that, rarely, dermatologists relate the ability to react the skin with touch and its influence on the nervous system and immune system; touching the skin and stimulating it in the form of massages, it has the power to facilitate the recovery of burns²¹, reduce levels of stress and anxiety hormones, increase the delta waves that indicate relaxation and decrease of the alpha and beta waves in the electroencephalogram, reducing the cortisol and raising the cytotoxic capacity, increasing the number of natural killer cells; This resource is available to specialists and can be of great value in the treatment of psychodermatoses, using the assistance of massage therapists¹.

VII. DISCUSSION

Multidisciplinary services have been developed within specialties and subspecialties such as dermatology, which can be operated by several specialists (group approaches) or by a single specialist with a multidisciplinary approach²². Intervention levels may vary from providing tranquility and effective communication (either in primary care or in medical specialties) to specific psychotherapies and psychopharmacological treatments²³. Psychotherapeutic interventions, we have: psychoeducational



interventions, stress management procedures, cognitive behavioral therapy, brief dynamic therapy, family therapy and group interventions; they have been applied to patients in controlled research^{24,25}. The prescription of psychotropic drugs is applied, individually, to a careful balance between potential benefits and adverse effects²⁶. A macroanalysis²² recommends it in specific clinical situations: (1) presence of psychological disorders (for example, demoralization, irritable mood) or psychiatric illness (for example, major depression, panic disorder); (2) refractoriness of lifestyle modifications guided by primary care or other non-psychiatrists; (3) the presence of abnormal disease behavior (from hypochondria to disease denial) that interferes with the treatment or that leads to frequent use of medical care, and (4) impaired quality of life and functioning, not all justified by the medical condition.

A review on psychiatric comorbidity in patients with dermatological disease, indicates that most dermatologists are not mental health professionals with extensive training in psychotherapy and psychopharmacology, but have mental abilities to acquire basic principles of these fields and apply them in the improvement of their patients; dermatologists should implement screening tools, diagnose psychiatric comorbidities and refer to psychiatry is an excellent option for management, if the patient agrees, but if you do not want to go, start the treatment falls into the hands of the dermatologist; i describe psychiatric comorbidities and some common psychotropic agents²⁷.

a) Anxiety

Either a secondary psychiatric disorder in response to severe psoriasis, an exacerbation factor in cutaneous pathology such as eczema, or primary psychiatric disorder such as neurotic excoriations; a class of anxiolytics are benzodiazepines, they have a rapid onset of action and an effect that goes from short to long-acting; quick start, gratification is immediate and this kind of medication can be very addictive, particularly if used for extended periods of time; risks: sedation and respiratory depression, and withdrawal seizures are dangerous with a life-threatening risk of abrupt discontinuation after long-term use; alprazolam is one of the most used benzodiazepines and confers a unique antidepressant effect, unlike other benzodiazepines, therefore, for an individual with a mixture of depressive symptoms and anxiety, alprazolam; It may be a good choice; starting with a low dose is always a good option and climbing slowly until you reach the minimum effective dose is important to avoid excessive sedation and limit the risks; the typical starting dose is 0.25 mg three times a day (TID), with the ability to increase the dose every 3 to 4 days to a maximum of 4 mg/day and it is recommended to start even lower, at 0.125 mg (half of a 0.25 mg tablet) TID and hold up to a maximum of 2 mg/day; An additional recommendation

is to use benzodiazepine for 2–3 weeks and to process a psychiatric referral, for providers who are not accustomed to administering this medication in the long term, note that alprazolam is particularly addictive due to its rapid onset and short duration of action²⁷. A long-acting benzodiazepine, such as clonazepam, is suggested as a reasonable alternative²⁸. Although clonazepam does not confer the same antidepressant effect, it is less addictive and may be more suitable for patients with strict anxiety conditions, without signs of depression, this medication is started with 0.25 mg twice daily (BID) and increases every 2 days up to 0.5 mg TID, with a maximum dose of 4 mg/day, although as with alprazolam, a maximum of 2 mg/day may be more practical for dermatologist prescribers²⁷. Once again, benzodiazepines are the most suitable for short-term use, and as such, they are commonly used to control anxiety while safer, long-term but slower-acting treatments (as discussed later in the text) are taking time to produce the physiological changes necessary for therapeutic benefit²⁸.

Another type of anxiolytic is buspirone, which is classified as a non-benzodiazepine anxiolytic, which means that it does not carry the same risks of addiction, withdrawal and sedation: this medication is typically prescribed to treat generalized anxiety disorder and its effects may appear at less 2 weeks after taking it; initial dose of buspirone is 5 mg TID or 7.5 mg BID; due to its linear pharmacokinetics and short half-life, it is possible to increase the dose by 5 mg/day every 2-3 days to a goal of 20-30 mg/day, divided into two or three daily doses; if, after several weeks, an adequate clinical improvement has not been obtained, it is possible to assess a maximum dose of 60 mg/day; side effect profile of buspirone is relatively mild, with common symptoms such as gastrointestinal (GI) disorders (nausea, vomiting and diarrhea), drowsiness, fatigue, lightheadedness/dizziness, and headache²⁷.

As another alternative, selective serotonin reuptake inhibitors (SSRIs), escitalopram and paroxetine are also approved for the treatment of generalized anxiety disorder²⁹. SSRIs are first-line antidepressant medications that have been used safely for years, with common adverse effects that include GI disorders, sexual dysfunction and drowsiness, and possible serious reactions such as serotonin syndrome, paradoxical increased suicidality and inappropriate secretion syndrome of antidiuretic hormone (SIADH)²⁷. In comparison, escitalopram has demonstrated superiority over paroxetine and has demonstrated long-term efficacy and safety in the treatment of generalized anxiety disorder³⁰⁻³². Escitalopram can be started at 10 mg/day and increase after 1 week to a maximum of 20 mg/day; both doses have demonstrated efficacy and good tolerability; as escitalopram is an antidepressant, unlike benzodiazepines and buspirone, an additional potential risk is to trigger a manic episode in a patient

with bipolar disorder, it is important to ensure that there is no history of mania in patients before starting escitalopram or any other antidepressant²⁷.

b) Depression

For some people with depression, irritability and psychomotor skills, agitation can be a prominent feature, and this can contribute to the development of primary psychiatric conditions such as neurotic excoriations, factitious dermatitis and excoriated acne; doxepin is a tricyclic antidepressant drug (TCA) that has proven very useful in the treatment of this type of patients, the reason why doxepine is unique among other antidepressants is that it demonstrates potent antihistamine effects, reducing itching, antihistamine effects as well they can cause drowsiness, so it is recommended to take it while sleeping; Doxepin can be started at 25 mg/day and increased by 25 mg every 5-7 days until the ideal therapeutic dose is reached, typically between 100 and 300 mg/day; like TCA, doxepin comes with all the classic side effects and risks that this type of medication entails, including anticholinergic symptoms (dry mouth, urinary retention, blurred vision, tachycardia, etc.), cardiac conduction problems and orthostatic hypotension; TCAs are potentially lethal in overdoses, so be sure to ask directly and explicitly about suicidal thoughts or self-harm, any suspicion of suicide in a patient should cause caution when prescribing, making sure to avoid providing an excessive amount of tablets beyond what is necessary until your next appointment, closer follow-up (more frequent visits) may also be justified²⁷. Fortunately, it is possible to verify the serum levels of doxepine, and this can be useful not only in the investigation of possible cases of overdose, but also to confirm the patient's compliance with the treatment and determine if the therapeutic levels have been reached³³.

For other variants of depression, SSRIs are typical first-line medications, due to their proven effectiveness, better safety and tolerability compared to alternative antidepressants such as TCA (tricyclic antidepressants) and monoamine oxidase inhibitors²⁷. Serotonin-noradrenaline reuptake inhibitors (SNRIs) are also a first-line option, and some studies have shown SNRI, venlafaxine, is particularly effective in melancholic depression and patients with significant psychomotor retardation³⁴. SSRIs fluoxetine and sertraline are considered "activation" medications, they are also good for melancholic depression; sertraline demonstrates better effectiveness and better tolerability^{35,36}. In fact, a large meta-analysis concluded that sertraline is the best option for initial treatment in patients with moderate to severe depression, since it has the best balance of effectiveness, tolerability and cost³⁶. Sertraline can be started at 50 mg/day and increase every week by 25 mg/day to a maximum of 200 mg/day, if necessary, some psychiatrists start with an even lower dose (12.5 or 25 mg/day) and wait for see the benefits at 100 mg/day, in most cases²⁷.

SSRIs and SNRIs are widely prescribed and are generally safe options, which dermatologists can prescribe²⁷.

c) Psychosis

Psychosis is the main psychopathology underlying psychodermatology, disorders such as delusions of parasitosis, where patients maintain fixed and false ideas (delusion) that parasites reside within their skin; such delusional conditions are part of a subset of psychosis, called monosymptomatic hypochondriacal psychosis (MHP), in which delusions are confined and much less penetrating and harmful than the psychotic symptoms of conditions such as schizophrenia³⁷. When dealing with patients suffering from delusions, it is important to accept and not argue to establish a good relationship^{27,38}; willingness to examine the evidence, keep an open mind and the clinician, at the same time, should avoid validating or reinforcing the patient's false beliefs²⁷.

Before prescribing psychotropic medications, it is imperative that the clinician determine if the patient's symptoms come from real organic origins; a patient with suspected DI (delusional infestation), for example, may have an infestation with scabies or lice (careful examination and skin scraping, are vital), or they may experience training (tingling sensation in the skin) as a result of abuse of recreational drugs such as amphetamines, cocaine, alcohol or other illegal substances²⁷. Other causes include vitamin B12 deficiency, cerebrovascular disease, multiple sclerosis, Parkinson's disease, syphilis, hypothyroidism, diabetes, cancer and iatrogenic^{39,40}. Dopamine medications prescribed for Parkinson's disease, including ropinirole and pyridostil, have been identified as causes of DI in several cases⁴¹. Discarding these triggers is important, since only primary DI (caused by true delirium/psychosis) is treated with antipsychotics, while secondary DI (which has an organic basis) is treated by addressing the underlying problem²⁷. Discarding substance abuse may require more than simply asking the patient if they use drugs, since substance abuse seems to be quite frequent in this patient population, and they do not always openly reveal the habit⁴². As result, routine urine drug tests may be recommended for new patients with ID, even if they deny drug use²⁷.

Pimozide is a typical first-generation antipsychotic, it has demonstrated effectiveness in the treatment of MHP in dermatological patients, particularly delusions of parasitosis^{37,43}. The initial dose is 1 mg/day and can be increased by 1 mg every week, the maximum dose is 10 mg/day, but patients with MHP generally show a good response at doses of 4 mg/day or less; extrapyramidal symptoms, such as dystonia and parkinsonism, are possible and can be combated with benztropine mesylate, taking 1-2 mg BID or diphenhydramine by taking 25 mg 3-4 times a day;

cardiac conduction abnormalities have also been detected, reporting electrocardiographic changes such as T-wave abnormalities and prolongation of the QT interval, so an electrocardiogram is recommended before starting to take pimozide and after treatment has begun; if there is prolongation of the QT interval, the medication should not be started or should be discontinued²⁷; pharmacological interactions are also possible, particularly with drugs that are metabolized by cytochrome P-450 isoenzyme 3A4⁴⁴.

Although pimozide has historically been the best option for ID, the development of second-generation atypical antipsychotics, new and safe (SGAs), cause less extrapyramidal and anticholinergic side effects^{44,45}, a recent and thorough investigation into the effectiveness of SGA identified 63 published cases of DI in which SGAs were used, demonstrating partial or total remission obtained in 75% of patients⁴⁴. Olanzapine and risperidone were the most used agents²⁷. Other atypical antipsychotics recommended for the treatment of ID include quetiapine, amisulpride and a third generation antipsychotic, aripiprazole^{46,47}. Dosage of these medications (risperidone 0.5–1 mg daily; olanzapine 5 mg daily; quetiapine 50 mg daily; amisulpride 50 mg daily; and aripiprazole 5 mg daily) are low doses for DI than for more generalized psychotic conditions such as schizophrenia, and routine laboratory monitoring is not usually necessary²⁷. Due to the risks of cardiotoxicity and pharmacological interactions with pimozide, these agents have now replaced pimozide as a first-line treatment for DI⁴⁴. It should be noted that SGA clozapine was not included in this list, since this medication requires frequent monitoring of blood count due to the risk of agranulocytosis²⁷. In addition, it is important to recognize that almost all antipsychotic agents can cause weight gain and/or metabolic syndrome, presenting a greater risk with olanzapine and clozapine, and little or nothing with amisulpride and aripiprazole⁴⁸. It has been determined that this weight gain is mediated by an antagonistic effect on H1 histamine receptors (H1R), and the commonly prescribed H1R agonist and anti-vertigo drug, betahistine, is able to safely and effectively mitigate weight gain associated with antipsychotics^{49–51}.

Although it may be difficult to convince a patient to try an antipsychotic medication, present the medication as capable of diminishing uncomfortable sensations (instead of explicitly stating that it will treat psychosis or improve the patient's skin), it is recommended; also explain to the patient the importance of treating their condition from the outside in (with topical medications and creams, such as mupirocin and moisturizers) as well as from the inside out (with oral medications), a successful treatment requires both attack routes, to support the patient compliance; It is useful to keep in mind that these

medications take 6 weeks to start working and their maximum effect is expected up to 6 months after starting, if the treatment is effective and the patient experiences remission of ID, it is reasonable to try to start weaningm antipsychotic 3 months after obtaining remission, with a plan to restart if a relapse occurs²⁷. The greatest risk of recurrence is within the first 3 to 4 months after discontinuation of the antipsychotic, 25% of patients experience the return of symptoms requiring longer courses of treatment or possibly long-term maintenance therapy⁵².

Although the prescription of antipsychotics is not a typical activity for dermatologists, some have argued that patients with MHP differ dramatically from more affected individuals seen by psychiatrists; antipsychotic treatment can improve the patient, since they are "difficult" patients who continuously rotate in the offices without any sign of improvement despite extensive and repetitive advice, represent an opportunity for dermatologists, take care of the health of their patients and focus your efforts on the cause of the skin condition²⁷.

d) Obsessive compulsive

The last conditions to discuss are those based on obsessive behavior: compulsive, although referral for psychological counseling, such as cognitive behavioral therapy, exposure and response prevention or other behavior modification therapies, can be extremely effective and should be considered first-line, patients may be resistant to these options or may not respond, in which case psychopharmacological interventions are necessary^{53–55}.

Clomipramine is a TCA that has demonstrated superiority in its class for the treatment of OCD and related conditions, such as trichotillomania and onychophagy; Clomipramine starts at 25 mg/day and can be increased to 250 mg/day if necessary; for children, the maximum dose is 3 mg/kg /day; side effects are similar to other eating disorders as previously discussed, with a little more seizure onset (seizure threshold decreases) and sexual dysfunction²⁷.

Fluoxetine is an SSRI alternative for OCD, which showed similar efficacy and has been successful in treating dermatological conditions such as habit-tic nail deformity; it is prescribed at 20 mg/day and can be increased up to 80 mg/day maximum if necessary, although 20–40 mg/day is typically effective; as with other SSRIs, the effects may not be noticed for a few weeks, and the maximum benefit may take 6 to 8 weeks; it should be noted that fluoxetine is approved by the FDA for depression, but not OCD (obsessive compulsive disorder), so its use in this condition would be off-label²⁷.

A more exclusive treatment option for this class of conditions, it's N-acetylcysteine (NAC), which has shown promise in the treatment of trichotillomania^{56–59}.

Unlike other impulse control disorders, trichotillomania is often resistant to SSRIs, but a Cochrane review by Rothbart et al. determined that NAC, as well as clomipramine and olanzapine (an antipsychotic), can be effective⁶⁰. NAC is an amino acid that acts as a glutamate modulator and can exert its effect by normalizing dysregulated extracellular glutamate in the nucleus accumbens: an area of the brain that plays a key role in motivation and reward⁵⁷. The dose of NAC for trichotillomania is 1,200 mg/day, with few adverse effects reported by patients²⁷. Some argue that the apparent efficacy of NAC in trichotillomania suggests could and should be tested for other impulse control disorders that involve scratching or pulling⁵⁹.

For the habit-tic deformity of the nail, a clinician discovered an economical and safe treatment that was

effective in normalizing the nails of two patients after 3 to 6 months of use, made the patients apply a cyanoacrylate adhesive (instant glue) to the proximal nail fold of the affected nails 1 to 2 times per week, effectively forming a physical barrier to external trauma, although it is creative, this method does not necessarily cure the underlying motivation of patients to scratch their cuticles, and a relapse can be expected and, in fact, was seen in some patients, interestingly, this reconstituted treatment achieved normalization of the nail, and after the subsequent interruption of therapy, he was able to maintain normal nails⁶¹. It is also important to note the possibility of developing contact dermatitis in response to cyanoacrylate⁶²⁻⁶⁴.

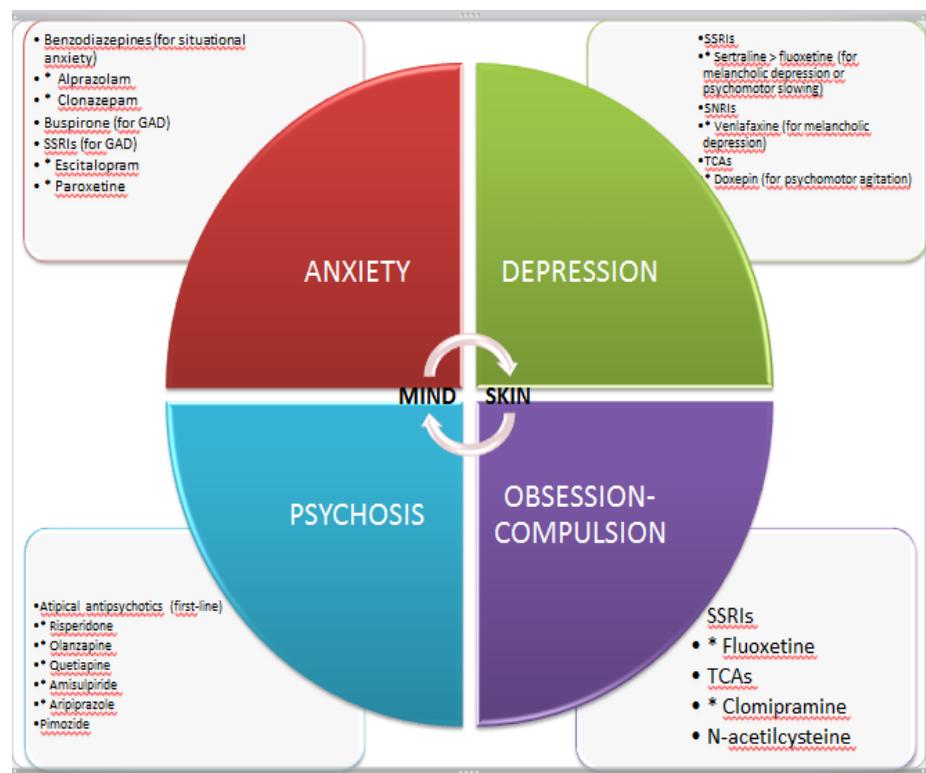


Figure 1: Use of psychotropic medications to treat dermatological conditions⁶⁵.

It is known that certain psychotropic agents are useful in the treatment of dermatological conditions; if pruritus is the main problem, doxepine is the preferred agent; on the other hand, if pain predominates, such as burning, itching or irritation, amitriptyline is the preferred agent⁶⁵.

Doxepine: Is often used to treat pruritus when more conventional antipruritic agents, such as diphenhydramine or hydroxyzine, are inadequate; there are several advantages of the use of doxepine for the control of pruritus compared to conventional antipruritic agents; first, doxepine has a much greater affinity for histamine receptors than traditional antihistamines and therefore it can exert much more potent antipruritic

effect, the affinity of doxepine for the histamine (H1) receptor in vitro is approximately 56 times hydroxyzine and 775 times greater than diphenhydramine; second, the therapeutic effect of doxepine is much longer and longer lasting than any of these antihistamine medications because of its long half-life, doxepine is taken once a day, usually at bedtime to provide a therapeutic benefit for 24 hours; therefore, patients with conditions that present with severe pruritus, such as atopic dermatitis, who complain of waking up in the middle of the night, even if they are taking hydroxyzine or diphenhydramine before bedtime, usually find calm when they switch to doxepin and can sleep all the time night; third, doxepine normalizes the architecture of



sleep, when the patient spends more time in a deep state of sleep, the excoriations decrease dramatically; doxepine may also be useful in the treatment of patients with chronic urticaria or other histamine-mediated disorders who have failed traditional antihistamine treatment; there is no good data on the optimal therapeutic blood level of doxepine for the treatment of conditions such as pruritus or hives, a wide range of doses may be possible depending on each patient, for example, dose of doxepine sufficient to control pruritus can vary from only 10 mg at bedtime (often used in liquid preparation doxepine 10 mg/cc) up to the maximum dose for the treatment of depression 300 mg at bedtime and if a patient does not show an initial therapeutic response, the physician should consider gradually increasing the dose of doxepine according to tolerance to the desired therapeutic response⁶⁵.

Amitriptyline: For various manifestations of pain sensations such as burning, itching or irritation, amitriptyline is a preferred agent over doxepine due to better documentation of its effectiveness as an analgesic agent; when eating disorders are used as analgesics, the required dose tends to be much lower than the dose required for its antidepressant effect; the patient can start with 25 mg at bedtime and start the maximum effective dose to use as an analgesic, a dose of 50 mg/day or less should generally be sufficient; the side effects of amitriptyline are similar to those of doxepine, namely sedatives, cardiac, anticholinergics and α -adrenergic side effects, including orthostatic hypotension, which can be problematic in elderly patients; adverse effects can be minimized by using the lowest effective dose possible; if the patient is unable to tolerate amitriptyline, other eating disorders, such as imipramine or desipramine, may be used; dosage range for these medications are similar to those of amitriptyline; if these new TCAs are not tolerated, SSRIs can be tried, there are some useful SSRI reports as analgesics; additionally, duloxetine, an SNRI, has an FDA indication for the treatment of chronic pain and can be considered in these cases⁶⁵.

VIII. SEARCH METHODOLOGY

A computerized bibliographic investigation was conducted in the Pubmed search engine <https://www.ncbi.nlm.nih.gov/pubmed/>, during the period from January 2019 to August 2019; using the following keywords in English: Psychosomatic medicine, traditional medicine, complementary therapies, psychopharmacology, psychotropic drugs; found 4,255 articles; articles with a level of evidence I, II and III were selected; with a period of seniority of 20 years and for its content of scientific interest and originality a total of 4,190 articles were excluded from the analysis: studies without specific description of the treatment of

Psychosomatic medicine that did not describe the relationship between psychopharmacology, psychotropic drugs and complementary therapies; so 65 articles were used. Microsoft Windows, version 6.3 (build 9600), from 2013 was used.

IX. CONCLUSION

In the clinical practice of dermatology, one in four patients who go to consultation with an acute or chronic dermatological disease is affected by a psychological/psychic disorder or a psychological/psychiatric pathology triggers or aggravates a dermatological disease. They do not know it, and it is the doctor who must suspect that behind a dermatosis a psychiatric disorder can be hidden or vice versa. This must be confirmed by a specific systematic interrogation, and if it exists, it must be treated properly, thus contributing to cure the dermatosis consulted and the associated pathology. The most frequent psychiatric disorders in dermatological patients are anxiety, depression, psychosis and obsessive-compulsive disorders. But, while the patient with anxiety may be more or less aware of his problem, depression, psychosis or obsessive-compulsive disorders usually present themselves in a masked way or not recognized. Dermatologists must be aware of the potential for significant improvement in the quality of life when addressing the psychic dimension of skin disease.

The relationship of mental pathologies and dermatological diseases: generally, it is bidirectional, it is necessary to analyze the impact that dermatological pathologies have on psychic disorders or vice versa and cut this cycle. Depression is most often observed in patients with psoriasis; anxiety and depression, in patients with vitiligo, pruritus, acne, alopecia areata and urticaria, anxiety more frequently in patients with rosacea and chronic chronic lichen, psychosis in patients with delusional infestation and obsessive-compulsive disorder in trichotillomania and onychophagy; finding numerous evidence for these pathologies. Thus, treating patients with mental processes that triggered some dermatological pathology, remitting the cause we can control the skin disease and vice versa, in the event that the dermatological disease triggers or exacerbates the psychic pathology, treating the skin component will relieve the psychic pathology; the dermatologist, in the consultation must be empathetic, meet the expectations of the patient and be optimistic, aspects of the clinical encounter that can foster a positive therapeutic relationship; in addition, you must master the basic anti-stress mind-body techniques; that they can keep stress at a non-harmful level at no cost; encouraging them to perform them in leisure time and to practice them routinely to maintain their physical and mental balance, namely: upright posture, change of respiratory pattern from thoracic to abdominal, muscle relaxation and

meditation; You should also know and recommend, as appropriate, various complementary therapies. Multidisciplinary services have been developed within specialties and subspecialties such as dermatology, which can be operated by several specialists (group approaches) or by a single specialist with a multidisciplinary approach, the levels of intervention can vary from providing tranquility and effective communication to specific psychotherapies and Psychopharmacological treatments, which are applied, individually, to a careful balance between potential benefits and adverse effects.

BIBLIOGRAPHY

1. Doglia R. "The need of dermatologists, psychiatrists and psychologists joint care in psychodermatology". *An Bras Dermatol.* 2017; 92 (1): 63-7.
2. Paucar K. "Relación bidireccional de las patologías cutáneas con los trastornos mentales". *Rev Cient Cienc Méd.* 2018; 21 (1): 84-89.
3. Franca K, Chacon A, Ledon J, Savas J, Nouri K. "Psychodermatology: a trip through history". *An Bras Dermatol*; 2013; 88(5): 842-3.
4. Yadav S, Narang T, Kumaran M S. "Psychodermatology: A comprehensive review". *Indian J Dermatol, Venereol Leprol* 2013; 79: 176-92.
5. McEwen B S." Brain on stress: How the social environment gets under the skin". *Proc Natl Acad Sci U S A.* 2012; 109: 17180-5.
6. Arck P C, Slominski A, Theoharides T C, Peters E M, Paus R. "Neuroimmunology of Stress: Skin Takes Center Stage". *J Invest Dermatol.* 2006; 126: 1697-704.
7. Chen Y, Lyga J. "Brain-skin connection: stress, inflammation and Skin Aging". *Inflamm Allergy Drug Targets.* 2014; 13: 177-90.
8. Escalas J, Guerra A, Rodríguez-Cerdeira M C. "Tratamiento con psicofármacos de los trastornos psicodermatológicos". *Actas Dermatosifiliogr.* 2010; 101: 485-94.
9. Ramirez J M. "The integrative role of the sigh in psychology, physiology, pathology and neurobiology". *Prog Brain Res.* 2014; 209: 91-129.
10. Sayar K, Köse O, Ebrinc S, Setin M. "Hopelessness, depression and alexithymia in Young Turkish soldiers suffering from alopecia areata". *Dermatol Psychosom* 2001; 2 ; 12-15.
11. Richards H L, Fortune D G, Griffiths C E, Main C J. "Alexithymia in patients with psoriasis: clinical correlates and psychometric properties of the Toronto Alexithymia Scale-20". *J Psychosom Res* 2005; 58: 89-96.
12. Maniaci G, Epifanio M S, Marino M A, Amoroso S. "The presence of alexithymia investigated by the TAS-20 in chronic urticaria patients: A preliminary report". *Allerg Immunol.* 2006; 38: 15-9.
13. Picardi A, Pasquini P, Cattaruzza M S, Gaetano P, Melchi C F, Baliva G, et al. "Stressfull life events, social support, attachment security and alexithymia in vitílico. A case-control study". *Psychother Psychosom* 2003; 72: 150-8.
14. Mosini A C, Saad M, Casaletti C, De Medeiros R, Prieto M F, Camelo Frederico. "Neurophysiological, cognitive-behavioral and neurochemical effects in practitioners of transcendental meditation - A literature review". *Rev Assoc Med Bras* 2019; 65(5): 706-713
15. Gupta M A, Gupta A K, Ellis C N, Koblenzer C S. "Psychiatric Evaluation of the Dermatology Patient". *Dermatol Clin.* 2005; 23: 591-9.
16. Lavda A C, Webb T L, Thompson A R. "A meta-analysis of the effectiveness of psychological interventions for adults with skin conditions". *Br J Dermatol.* 2012; 167: 970-9.
17. Shenefelt P D. "Psychological interventions in the management of common skin diseases". *Psychol Res Behav Manag.* 2010; 3: 51-63.
18. Fried R G. "Nonpharmacological Management of Psychodermatologic Conditions". *Semin Cutan Med Surg.* 2013; 32(2): 119-25.
19. Shenefelt P D. "Hypnosis in dermatology". *Arch Dermatol.* 2000; 136: 393-9.
20. Schreiber L, Odlaug B L, Grant J E. "Diagnosis and treatment of trichotillomania". *Neuropsychiatry.* 2011; 2: 123-132.
21. Field T, Peck M, Krugman S, Tuchel T, Schanberg S, Kuhn C, et al. "Burn injuries benefit from massage therapy". *J Burn Care Rehabil.* 1998; 19: 241-4.
22. Fava G A, Cosci F, Sonino N. "Current Psychosomatic Practice". *Psychother Psychosom.* 2017; 86: 13-30.
23. Gerger H, Hlavica M, Gaab J, Munder T, Barth J. "Does it matter who provides psychological interventions for medically unexplained symptoms? A meta-analysis". *Psychother Psychosom.* 2015; 84: 217-226.
24. Abbass A, Kisely S, Kroenke K. "Short-term psychodynamic psychotherapy for somatic disorders". *Psychother Psychosom.* 2009; 78: 265-274.
25. Hartmann M, Bazner E, Wild B, Eisler I, Herzog W. "Effects of interventions involving the family in the treatment of adult patients with chronic physical disease". *Psychother Psychosom.* 2010; 79: 136-148.
26. Fava G A, Guidi J, Rafanelli C, Sonino N. "The clinical inadequacy of evidence-based medicine and the need for a conceptual framework based on clinical judgment". *Psychother Psychosom.* 2015; 84: 1-3.
27. Connor C J. "Management of the psychological comorbidities of dermatological conditions":



practitioners' guidelines". *Clinical, Cosmetic and Investigational Dermatology*. 2017; 10: 117–132.

28. Wang S M, Kim J B, Sakong J K, et al. "The efficacy and safety of clonazepam in patients with anxiety disorder taking newer antidepressants: a multicenter naturalistic study". *Clin Psychopharmacol Neurosci*. 2016; 14(2): 177–183.

29. Kavan M G, Elsasser G, Barone E J. "Generalized anxiety disorder: practical assessment and management". *Am Fam Phys*. 2009; 79(9): 785–791.

30. Bielski R J, Bose A, Chang C C. "A double-blind comparison of escitalopram and paroxetine in the long-term treatment of generalized anxiety disorder". *Ann Clin Psychiatry*. 2005; 17(2): 65–69.

31. Davidson J R, Bose A, Korotzer A, Zheng H. "Escitalopram in the treatment of generalized anxiety disorder: double-blind, placebo controlled, flexible-dose study". *Depress Anxiety*. 2004; 19(4): 234–240.

32. Davidson J R, Bose A, Wang Q. "Safety and efficacy of escitalopram in the long-term treatment of generalized anxiety disorder". *J Clin Psychiatry*. 2005; 66(11): 1441–1446.

33. Leucht S, Steimer W, Kreuz S, Abraham D, Orsulak P J, Kissling W. "Doxepin plasma concentrations: is there really a therapeutic range?". *J Clin Psychopharmacol*. 2001; 21(4): 432–439.

34. Singh A B, Bousman C A, Ng C H, Byron K, Berk M. "Psychomotor depressive symptoms may differentially respond to venlafaxine". *Int Clin Psychopharmacol*. 2013; 28(3): 121–126.

35. Baghai T C, Eser D, Moller H J. "Effects of different antidepressant treatments on the core of depression". *Dialogues Clin Neurosci*. 2008; 10(3): 309–320.

36. Cipriani A, Furukawa T A, Salanti G, et al. "Comparative efficacy and acceptability of 12 new-generation antidepressants: a multipletreatments meta-analysis". *Lancet*. 2009; 373(9665): 746–758.

37. Levin E C, Gieler U. "Delusions of parasitosis". *Semin Cutan Med Surg*. 2013; 32(2): 73–77.

38. Patel V, Koo J Y. "Delusions of parasitosis; suggested dialogue between dermatologist and patient". *J Dermatolog Treat*. 2015; 26(5): 456–460.

39. Koo J, Lebwohl A. "Psychodermatology: the mind and skin connection". *Am Fam Phys*. 2001; 64(11): 1873–1878.

40. Flann S, Shotbolt J, Kessel B, et al. "Three cases of delusional parasitosis caused by dopamine agonists". *Clin Exp Dermatol*. 2010; 35(7): 740–742.

41. Kolle M, Lepping P, Kassubek J, Schonfeldt-Lecuona C, Freudenmann R W. "Delusional infestation induced by piribedil add-on in Parkinson's disease". *Pharmacopsychiatry*. 2010; 43(6): 240–242.

42. Marshall C L, Williams V, Ellis C, Taylor R E, Bewley A P. "Delusional infestation may be caused by recreational drug usage in some patients, but they may not disclose their habit". *Clin Exp Dermatol*. 2017; 42(1): 41–45.

43. Lorenzo C R, Koo J. "Pimozide in dermatologic practice: a comprehensive review". *Am J Clin Dermatol*. 2004; 5(5): 339–349.

44. Freudenmann R W, Lepping P. "Second-generation antipsychotics in primary and secondary delusional parasitosis: outcome and efficacy". *J Clin Psychopharmacol*. 2008; 28(5): 500–508.

45. Huber M, Lepping P, Pycha R, Karner M, Schwitzer J, Freudenmann R W. "Delusional infestation: treatment outcome with antipsychotics in consecutive patients (using standardized reporting criteria)". *Gen Hosp Psychiatry*. 2011; 33(6): 604–611.

46. Huang W L, Chang L R. "Aripiprazole in the treatment of delusional parasitosis with ocular and dermatologic presentations". *J Clin Psychopharmacol*. 2013; 33(2): 272–273.

47. Ladizinski B, Busse K L, Bhutani T, Koo J Y. "Aripiprazole as a viable alternative for treating delusions of parasitosis". *J Drugs Dermatol*. 2010; 9(12): 1531–1532.

48. Bak M, Fransen A, Janssen J, Van Os J, Drukker M. "Almost all antipsychotics result in weight gain: a meta-analysis". *PLoS One*. 2014; 9(4): e94112.

49. Barak N, Beck Y, Albeck J H. "A randomized, double-blind, placebo-controlled pilot study of betahistine to counteract olanzapine-associated weight gain". *J Clin Psychopharmacol*. 2016; 36(3): 253–256.

50. Barak N, Beck Y, Albeck J H. "Betahistine decreases olanzapine induced weight gain and somnolence in humans". *J Psychopharmacol*. 2016; 30(3): 237–241.

51. Lian J, Huang X F, Pai N, Deng C. "Ameliorating antipsychotic-induced weight gain by betahistine: mechanisms and clinical implications". *Pharmacol Res*. 2016; 106: 51–63.

52. Wong S, Bewley A. "Patients with delusional infestation (delusional parasitosis) often require prolonged treatment as recurrence of symptoms after cessation of treatment is common: an observational study". *Br J Dermatol*. 2011; 165(4): 893–896.

53. Brakoulias V. "Managing obsessive compulsive disorder". *Aust Prescr*. 2015; 38(4): 121–123.

54. Ost L G, Riise E N, Wergeland G J, Hansen B, Kvale G. "Cognitive behavioral and pharmacological treatments of OCD in children: a systematic review and meta-analysis". *J Anxiety Disord*. 2016; 43: 58–69.

55. Wootton B M. "Remote cognitive-behavior therapy for obsessivecompulsive symptoms: a meta-analysis". *Clin Psychol Rev*. 2016; 43: 103–113.

56. Goulding J M. "N-acetylcysteine in trichotillomania: further thoughts". *Br J Dermatol.* 2015; 172(6): 1683–1684.
57. Grant J E, Odlaug B L, Kim S W. "N-acetylcysteine, a glutamate modulator, in the treatment of trichotillomania: a double-blind, placebocontrolled study". *Arch Gen Psychiatry.* 2009; 66(7): 756–763.
58. Ozcan D, Seckin D. "N-Acetylcysteine in the treatment of trichotillomania: remarkable results in two patients". *J Eur Acad Dermatol Venereol.* 2016; 30(9): 1606–1608.
59. Taylor M, Bhagwandas K. "N-acetylcysteine in trichotillomania: a panacea for compulsive skin disorders?". *Br J Dermatol.* 2014; 171(5): 1253–1255.
60. Rothbart R, Amos T, Siegfried N, et al. "Pharmacotherapy for trichotillomania". *Cochrane Database Syst Rev.* 2013; 11: Cd007662.
61. Ring D S. "Inexpensive solution for habit-tic deformity". *Arch Dermatol.* 2010; 146(11): 1222–1223.
62. Bowen C, Bidinger J, Hivnor C, Hoover A, Henning J S. "Allergic contact dermatitis to 2-octyl cyanoacrylate". *Cutis.* 2014; 94(4): 183–186.
63. Davis M D, Stuart M J. "Severe allergic contact dermatitis to dermabond prineo, a topical skin adhesive of 2-octyl cyanoacrylate increasingly used in surgeries to close wounds". *Dermatitis.* 2016; 27(2): 75–76.
64. Lefevre S, Valois A, Truchetet F. "Allergic contact dermatitis caused by Dermabond ((R))". *Contact Dermatitis.* 2016; 75(4): 240–241.
65. Lee C S, Accordino R, Howard J, Koo J. "Psycopharmacology in dermatology". *Dermatologic Therapy.* 2008; 21: 69–82.

