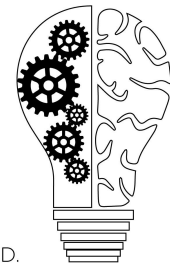


Episode 052: An Introduction to Psychodermatology: “The Mind-Skin Connection”

Chloé Walker, MD and David Puder, MD



DAVID PUDER, M.D.

**PSYCHIATRY &
PSYCHOTHERAPY**

This PDF is a supplement to the podcast “Psychiatry & Psychotherapy” found on [iTunes](#), [Google Play](#), [Stitcher](#), [Overcast](#), [PlayerFM](#), [PodBean](#), [TuneIn](#), [Podtail](#), [Blubrry](#), [Podfanatic](#)

There are no conflicts of interest for this episode.

On this week’s episode of the podcast, I sat down with Chloé Walker, a 2019 Loma Linda University graduate with a fresh passion and desire to pursue a career in psychodermatology. We had a candid conversation about how planting awareness of the interconnection between mind and skin will equip this specific patient population and medical professionals with the proper tools and resources that empower positive patient response and care outcomes.

What is Psychodermatology?

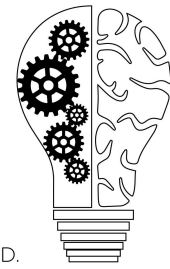
At the most basic level, [Psychodermatology](#) encompasses the interaction between mind and skin. It is the marriage between the two disciplines of psychiatry and dermatology, uniting both an internal focus on the non-visible disease, as well as an external focus on the visible disease. This tight interconnection between mind and skin is maintained at the embryological level of the [ectoderm](#) throughout life.

According to this [article](#), although the history of psychodermatology dates back to ancient times, the field has only recently gained popularity in the United States. More specifically, Hippocrates (460-377 BC) reported the relationship between stress and its effects on skin in his writings, citing cases of people who tore their hair out in response to emotional stress.

Understanding skin disorders through the lens of [psychosomatic medicine](#) allows the clinician to reveal the underlying source of suffering, which may be in the form of repressed expressions of anger and hostility. Stating, “In the skin we see not just our internal physical state but all our psychological processes and reactions. Pressure from within and pressure from without reveals itself on the skin.”

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This [study](#) concluded that how patients cope with an internally focused emotion plays an integral role in facilitating how the body externally manifests that emotion through the skin in a process clinically referred to as the *conversion phenomenon*. Specifically, PTSD was highly and positively correlated with Escape-avoidance ($r = 0.52$, $p < 0.001$), as an emotion-focused coping strategy which were in turn associated with Chronic Idiopathic Urticaria (CIU) severity and psychiatric symptom severity.

How are Psychodermatological Disorders Classified?

According to this [article](#), while there is no single universally accepted classification system of psychocutaneous disorders, the most widely accepted system, devised by Dr. Koo and Dr. Lee, involves [three main categories](#):

1) *Psychophysiologic disorders* encompasses those skin conditions that are precipitated or exacerbated by the psychological stressor. Examples include acne, alopecia areata, atopic dermatitis, psoriasis, psychogenic purpura, rosacea, seborrheic dermatitis, and urticaria.

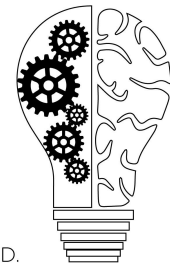
2) *Psychiatric disorders with dermatologic symptoms* encompass skin conditions that are associated primarily with an underlying psychopathology in which visible skin lesions are self-inflicted by the patient. Examples include body dysmorphic disorder, delusions of parasitosis, eating disorders, factitial dermatitis, neurotic excoriations, obsessive compulsive disorders, and trichotillomania.

3) *Dermatologic disorders with psychiatric symptoms* encompass those skin conditions that secondarily develop an emotional disorder in which the psychological consequences often outweigh the physical symptoms in severity. Examples include alopecia areata, albinism, chronic eczema, hemangiomas, ichthyosis, psoriasis, rhinophyma, and vitiligo.

As you can see from this classification system alone, there is a significant amount of overlap that exists between categories.

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Direct vs Indirect classification

A [2019 comprehensive review article](#) suggests that psychiatric disease may have a direct or indirect association to dermatological disease:

A *direct association* involves psychiatric disorders that cause the dermatological disorder purely by itself without any secondary influence. This classification includes stress and tactile hallucinations that are not physically visible.

An *indirect association* involves psychiatric disorders that trigger behaviors causing physically visible skin damage. This includes the skin changes that result from manual scratching due to psychogenic pruritus.

Some psychiatric diseases may have both direct and indirect associations in the development of dermatological diseases. For example, depression is directly associated with psoriasis through an inflammatory mechanism, and is indirectly associated via trichotillomania.

Temporal classification

Most dermatologists encounter patients who report a [temporal relationship](#) between disease flares and stressful life events.

[Board certified dermatologist and clinical psychologist, Dr. Fried states](#), “When it comes to treating patients who we suspect may be experiencing skin, hair, or nail problems as a result of stress or other emotional factors, it is helpful to ask them whether their skin seems to look or feel worse when they are stressed.”

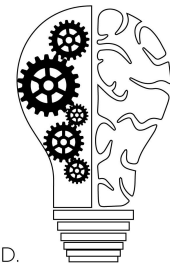
Developmental classification

Attachment style changes a patient’s connection with their dermatologist and their overall experience of stress.

In fact, a [2017 European multicentre study](#) found that secure attachment of dermatological outpatients may be a protective factor in the management of stress.

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Those participants with secure attachment reported stressful life events significantly less often and increased satisfaction with their dermatologist than those with insecure attachment styles.

The overall important takeaway highlighted in this [study](#) is the value of taking a thorough history of present and past psychosocial factors, including stressors and traumas to have a more in-depth understanding of the skin disease at hand preventing parasuicidal behaviors and suicide. Stating that Up to **90%** of patients who commit suicide may have a psychiatric disorder (50% MDD; 25% substance abuse and dependence followed by psychotic disorders, PTSD and body dysmorphic disorder).

Let's talk about Psychiatric Morbidity in Dermatology.

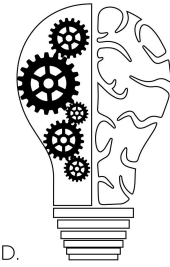
According to an [article](#) in the Indian Journal of Psychiatry, the incidence of psychiatric disorders among dermatological patients is estimated at **30 to 60%**.

Another [study](#) conducted in India suggests that recognition alone of psychiatric disorders by a dermatologist is not adequate. Stating that out of 636 patients, 104 (16.4%) had psychiatric consultations and in 97 of them a psychopathology had been diagnosed. The patients with a psychopathology constituted 15.3% of all the patients and 93.3% of those who received a psychiatric consultation. The most prevalent pathology was depression (31 patients 32.0%). The most prevalent dermatological diagnosis of the patients with psychiatric morbidity was chronic urticaria (25 patients, 25.8%).

This [study](#) showed how the emotional burden of skin increases the risk of self-harm and suicide. Questionnaire results including all consultant dermatologists in the British Association of Dermatologists Members Handbook 1996/97 320 reported (78% of the total sample) encounters of patients with psychological or psychiatric disturbance which they considered to be a consequence of their skin. Eighty-six participants were aware of a total of 178 patients who had attempted suicide associated with their skin disorder.

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Unique fears center around acne. This [study](#) concludes that “In the long run acne may cause cutaneous as well a psychological scars.” Stating that in a sample of 355 high school students from the city of João Pessoa with an average age of 16, there was a prevalence of 89.3% of acne vulgaris. The most prevalent psychosocial issue was “afraid that acne will never cease,” present in 58% of affected youth.

Another [study](#) supports that acne patients have an increased risk of depression and anxiety with anxiety being more common having a direct relationship to impairment of quality of life.

What is the Best Plan of Approach involving Treatment Modalities?

Role of the dermatologist

1. Have a good screening tool such as GAD-7 and PHQ-9
2. Get a full history including stressors and potential psychological/ developmental aspects. This largely involves *motivational interviewing*.

This [article](#) strongly supports the use of intake PHQ-9 and GAD-7 questionnaires (which are shorter in length, free to use and self-administered) as a practical approach for busy dermatology clinics.

Outpatient psychiatry and psychotherapy:

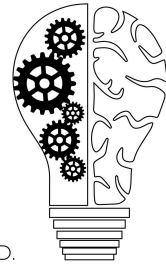
[Psychotherapy \(including behavioral modification techniques\) are first line especially when addressing pediatric psychocutaneous disorders.](#)

1. *Combined* treatment will be most effective:

[Treatment is determined based upon the underlying psychopathology:](#)

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- **OCD:** SSRI Fluoxetine, TCA Clomipramine, or N-acetylcysteine which has shown great promise in the treatment of trichotillomania.
 - **Anxiety:** SSRIs for Generalized Anxiety Disorder (GAD).
 - **Depression:** SSRI Sertraline preferred for melancholic depression or psychomotor slowing; SNRI Venlafaxine for melancholic depression; TCA Doxepin for psychomotor agitation.
 - **Psychosis:** Atypical antipsychotics are first line with Pimozide as an alternative option
- 2) Exercise, diet, [probiotics](#), sleep, [mindfulness](#), [spirituality](#) (forgiveness)

Intensive Outpatient Programs (IOPs) and Partial day treatment programs

1. [MEND Outpatient Program](#) (Mastering Each New Direction) specific to chronic disease states- meaning, congruence, family conflicts.

Inpatient:

1. Recommended for actively suicidal patients with a plan.

ECT/TMS/Ketamine

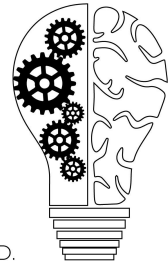
1. Recommended for treatment resistant patients with failed multiple treatments and therapies.

How does the Skin Respond to Stress?

This [article](#) discusses how stress activates body response systems including the Hypothalamus-pituitary-adrenal axis (HPA), Sympathetic axis (SA), Cholinergic axis (CA), and neuropeptides and neurotrophins. Acute stress triggers a “fight or flight” response by changes in memory performance, blood flow and energy metabolism. However, long-term stress exposure, the adaptive capacity of the stress response

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systems is lost due to lack of time for recovery and regeneration of the responsiveness to stress.

Stress may precipitate the vicious cycle in the pathogenesis of chronic urticaria (longer than six weeks in duration). This [article](#) provides insight into the mechanism of how stress facilitates vasodilation and increased vascular permeability also implicated in the pathophysiology of atopic dermatitis, eczema, and psoriasis. Early responses of stress result in the downstream secretion of cortisol and IL-18 which modulate HPA axis inhibition of secreted corticotropin-releasing hormone (CRH). However, cases of chronic exposure ultimately result in low cortisol release, increased production of proinflammatory cytokines and increased production of CRH secondary to hypocortisolism-induced loss of feedback control. Hair follicle keratinocytes, sebocytes, and mast cells also operate within a peripheral HPA axis equivalent to the central HPA axis in the skin secreting CRH and IL-18, as well as expressing CRH-R1 receptors in response to stress all contributing to severely induced cutaneous inflammation.

Link to full notes and OCD handout: [here](#)