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Diagnostic and Therapeutic Implications of Borderline Personality Disorder on Topical Steroid Dependence: A Case Report

Sir,

Topical steroids (TSs) are used to treat various inflammatory dermatological disorders. Increasing use of TS is being reported due to prescription by non-dermatologist doctors and increasing over-the-counter (OTC) purchase.¹ Personality attributes such as negative emotionality, neuroticism, and impulsivity, characteristic of borderline personality disorder (BPD) also predispose to substance abuse.² Substance use disorders are prevalent in up to 80% of those with BPD, with high novelty-seeking and poor coping strategies as risk factors.³ We report a young adult female with topical steroid dependence (TSD), concurrent mood disorder, and BPD traits, to describe the role of maladaptive personality traits in the clinical presentation of TSD and the need for integrated psychobiological management in such patients.

Case Report

Miss S, a 23-year-old unmarried female, presented to the emergency services with acute onset (two weeks) of irritability, episodes of aggression, persistent low mood with frequent crying spells, decreased interaction with her family members, diminished interest in her usual activities, disturbed biological functions, and an episode of deliberate self-harm (DSH). The above symptoms were precipitated by interpersonal conflict. Her pre-morbid history was characterized by stormy affective changes, sensitivity to rejections in inter-

personal contexts, impulsivity in social relationships, disturbances in self-image, and recurrent threats for self-harm, suggestive of BPD. Her past history revealed that over a period of three years, she had experienced two episodes of moderate depression, precipitated by interpersonal and family conflicts, with the last episode one year back. The past history was negative for mania, hypomania, and mixed episodes. Apart from hypothyroidism, for which she was on irregular treatment, there were no other medical co-morbidities. There was no history of oral/parenteral substance use. There was a history of alcohol dependence in her father and paternal and maternal grandfathers, as well as suicide in her mother, who passed away when the patient was aged five.

Mental status examination revealed mood swings, tearfulness, agitation, and demanding behavior. Hamilton Depression Rating Scale (HDRS) score was 10, indicative of mild severity. International Personality Disorder Examination (IPDE) ICD-10 revealed emotional instability, impulsivity, interpersonal sensitivity, and self-harm tendencies typical of the emotionally unstable type of BPD. Physical examination revealed pale facies, fatty hump on the nape of the neck, and thin skin with bruise-like lesions of prominent veins all over the body.

The forensic expert ruled out the likelihood of assault and bruises, due to the absence of typical progressive color changes and the presence of itching. The dermatologist opined that the pruritic reddish skin lesions are typical of TS abuse. A further detailed inquiry revealed OTC purchase and self-administration of skin-whitening creams for the past four years, which comprised of high-potency TSs (mometasone 0.1% and clobetasol propionate 0.05%). While the first use was prescription-based, the subsequent usage was perpetuated by herself when she perceived that the cream improved her skin texture; this also led her to progressively apply the cream more

frequently and in increasing amounts suggestive of craving. Any reduction in the usage of the creams would cause her itching, redness, and local swelling, as in the current presentation when she had stopped applying the cream after hospitalization. The absence of persistent preoccupation and associated checking and reassurance-seeking behaviors ruled out the possibility of body dysmorphic disorder.

Her blood biochemistry was normal. The panel revealed low basal serum cortisol (fasting, 8 AM) of 1.01 µg/dL (normal range: 7–28 µg/dL) and a normal serum adreno-corticotrophic hormone level (fasting, 8 AM) of 5.70 pg/mL (normal range: 5–50 pg/mL) with a normal thyroid profile. The endocrinologist opined that the paradoxical low levels of serum cortisol with cushingoid features could be due to the sudden stoppage of steroid application leading to the hypothalamo-pituitary-adrenal (HPA) axis suppression.

She was diagnosed with recurrent depressive disorder, current episode moderate depression without somatic syndrome, BPD, TSD with withdrawal features, and iatrogenic ACTH-independent Cushing's syndrome due to TSs.

She was started on cap. fluoxetine (20 mg/day) and tab. olanzapine (10 mg/day) for her depressive symptoms, along with individual psychotherapy (focusing on building positive coping skills, emotional resilience, anger management, and relapse prevention strategies) and family interventions (psychoeducation about illness, personality attributes, and need for positive support system). Oral prednisolone was given with a tapering regimen for the acute steroid withdrawal (started at 5 mg/day for a week and tapered to 2.5 mg/day for another week and stopped), and the skin changes were topically treated with emollients. Physical features of Cushing syndrome gradually resolved. Improvement was noted in depressive symptoms (HDRS after four weeks = 5), craving for TSs, and impulsivity traits and had

maintained well for further two months of follow-up, along with weekly therapy sessions. Informed written consent was obtained from the patient and the caregiver.

Discussion

The present case highlights the complex presentation of TSD and the role of BPD traits in predisposing and perpetuating the dependence. TSD is being increasingly reported due to unrestricted accessibility of TS and poor knowledge of its physical and psychological complications.⁴ TSD is found to be common in young women in whom TSs are used along with beauty products.^{5,6}

The patient developed TSD gradually, with signs of craving, tolerance, withdrawal, and loss of control, satisfying clinical criteria for dependence as per ICD-10. The interplay of genetic (positive family history of SUD), demographic (age, gender), and psychological (novelty seeking, emotional instability, impulsivity) risk factors and the unrestricted supply could have possibly led to the initiation and maintenance of TSD in the patient (Figure 1).²

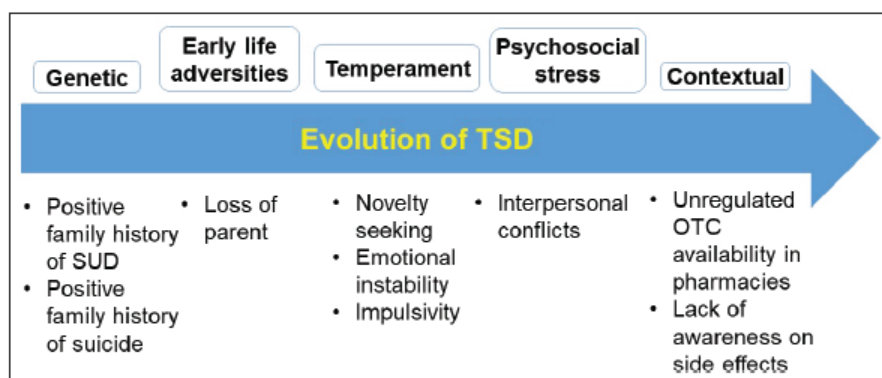
Atypical sites of bruises, a lack of typical color changes, and concurrent cushingoid features should strongly point towards TSD. The skin changes of TSD occur due to vasoconstriction, dermal atrophy, reduced cell proliferation, and diminished skin inflammation, leading to the spurious beautified skin texture.⁷ The large surface area of TS application, increased bioavailability with high potency steroids, and use beyond three weeks could have led to Cushing syndrome equivalent to that of oral steroid use.^{7,8}

The case also highlights the psychological and neurobiological aspects of mood dysregulation in patients with TSD and comorbid personality disorder. The mood dysregulation in our patient could have multiple etiological factors, namely (a) Cushing's syndrome causing negative mood states,⁹ (b) frontal lobe damage by steroids leading to poor prefrontal lobe control over the limbic structures,¹⁰ and (c) underlying maladaptive personality attributes of BPD.

The present report stresses the need for detailed evaluation and screening for all possible substances of abuse including TSs in those with maladaptive personality traits. Combined pharmacotherapy

FIGURE 1.

Risk Factors Involved in the Development of Topical Steroid Abuse in Borderline Personality Disorder



TSD: topical steroid dependence, SUD: substance use disorder, OTC: over-the-counter.

and psychotherapy is needed to address the symptoms of both TSD and BPD. We recommend further studies on estimating the prevalence of TSD, which will be helpful in spreading awareness and providing psychoeducation. A comprehensive evaluation, effective consultation-liaison services, and an integrated biopsychosocial model of management will underscore the holistic improvement in patients with TSD and maladaptive personality traits.

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Tele-triaging: The Way Ahead for Tertiary Care Psychiatry in India Post-COVID-19

Sir,

The origin of the word “triage” is from the French word “trier.” It was originally applied to a process of sorting, in the 18th century, by Baron Dominique Jean Larrey, who was the Surgeon-in-Chief to Napoleon’s Imperial Guard. The original concept primarily focused on mass casualty situations in warfare. In the current practice, triaging is applied in disaster situations and emergency health care settings.¹ Health care triaging is practiced in the West, as their system works mostly based on a prior appointment with a general physician and by referral to the specialist. We outline the potential application of the principles of triage in tertiary care psychiatry practice in India, in the context and aftermath of the ongoing COVID-19 pandemic.

In India, patients have direct access to tertiary care psychiatry hospitals. Despite this, few centers offer tertiary care, and there exists a huge treatment gap of around 83%. The major reason for this gap is that there are only three psychiatrists per million population.² With the ongoing COVID-19 situation, recent surveys show that more than 80% of those polled perceived a need for mental health care,³ which places a greater demand on the limited mental health care resources, over and above the existing treatment gap. Hence, tertiary care centers need to explore novel approaches to mental health care service provision, one such approach being tele-triaging. Tele-triaging would help the psychiatrist to make an informed decision about whether a

patient requires tertiary care or can be effectively managed in a nearby facility. This is particularly important in the current context, where in-person hospital visits are best deferred to ensure physical distancing and more local access to health care has to be promoted to minimize travel. The three important factors on which the triage decision would depend are as follows: the person’s need for specialist mental health services, the level of risk to the person and/or others, and the urgency of the response required from the tertiary mental health services.⁴

Tele-triaging has been recently initiated at our center. An integrated voice response system (IVRS) based follow-up service has been started for patients previously registered with the hospital, to register them for a telephone consultation with a qualified psychiatrist. The patient is then contacted by the qualified psychiatrist for a tele-assessment and is advised one of the following: continue the medications as prescribed with e-prescriptions being made available through the hospital information system, schedule a video consultation for a more thorough evaluation, meet the local psychiatrist at the district mental health center, or visit the tertiary care emergency services for immediate attention (**Figure 1**). Teleconsultation offers great privacy than in-person consultation and is likely to be more acceptable to patients who may not seek care from tertiary care centers on account of stigma. This system also reduces the travel costs for patients and makes it more feasible for a routine follow-up. The system is also devised to cater to the needs of a greater number of patients than what is currently being done. The advantage of this system is that it can cater even to people living in remote villages, as all it needs is access to a basic model mobile phone for con-

tacting the center. Tele-triaging for new consultations is in the pipeline.

Mental health tele-triaging inherently carries some challenges, like knowledge about mental health emergencies, ethical and legal aspects of care, etc.⁵ It, therefore, puts the onus on the experience of the mental health professionals. The following prerequisites should help in safe and appropriate decision making: adequate orientation to the triage role; proficiency in mental health assessment, including risk assessment; screening for problematic use of alcohol and other drugs, and the ability to assess the impact of a range of other health and social factors. In addition, communication and negotiation skills, access to well-developed algorithms for the assessment processes, knowledge of other services available in the local area and appropriate referral pathways, and a good understanding of the country’s mental health legislations.⁴

With limited tertiary services in India, tele-triaging will help us reach out to more people and ration the resources to those that need them the most. This is the right time for introducing tele-triaging. With outpatient services being closed in most tertiary hospitals, IVRS based telemedicine was introduced by all institutions such as All India Institute of Medical Sciences, New Delhi; National Institute of Mental Health and Neurosciences, Bengaluru; and Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry, to provide continued service. The Board of Governors in supersession of the Medical Council of India rapidly approved the guidelines for telemedicine practice, to guide telemedicine-based services. With travel restrictions and physical distancing likely to persist due to the ongoing pandemic, tele-triaging is the way forward for tertiary care psychiatry in India. The tertiary mental health service providers across the country could streamline their services on