Skin-picking behavior in a patient with schizoaffective disorder

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Introduction

- Psychocutaneous disease represents the interface between the two medical specialties of dermatology and psychiatry.
- The differential diagnosis for skin-picking behavior includes skin-picking disorder, body dysmorphic disorder, delusions of parasitosis, and dermatitis artefacta. Skin-picking disorder (SPD) is a new diagnosis in the DSM-V.
- Research has found significant association between skin-picking and depression, bipolar disorder 1, eating disorders, generalized anxiety disorder, obsessive-compulsive disorder, and body dysmorphic disorders[1-3]. Significant impairment is observed in patients even after the comorbid psychiatric conditions are controlled.
- **There is a paucity of information regarding skin-picking in psychotic disorders.** In fact, psychotic disorders are an exclusion criteria in some studies and reviews on skin-picking.
- **We report a case of a 34-year-old African-American male with 3 to 4 years of compulsive skin-picking alongside his diagnoses of schizoaffective disorder (depressive type) and alcohol use disorder.** A constant theme of his **derogatory auditory hallucinations is the cosmetic appearance of his excoriations and scars from picking.**

Purpose

Using our case report:

- Recognize the importance of addressing skin-picking in patients with psychotic disorders. It causes significant distress and may be an unnoticed or unaddressed component of their mental health.
- Demonstrate the pitfalls of diagnosis and management of skin-picking behavior in patients with a psychotic disorder.
- Describe the neurotransmitter pathways and possible interventions in a patient with skin-picking with psychotic disorder.
- Discuss how skin-picking with comorbid psychotic disorders may be addressed in the future.

Case Presentation

- Our patient is a 34 year-old African-American male with a diagnosis of schizoaffective disorder (depressive type) and alcohol use disorder. The patient has a long history of mental illness and has been treated even before he presented to our Community Mental Health Center (CMHC) in 2015. His past medical history reveals use of various antipsychotics over the years, including haloperidol, olanzapine, and valproic acid. He has not been treated with an SSRI other than trazodone. His current medications are oral quetiapine 200 mg once daily and 1.5 mL of 234 mg/1.5 mL intramuscular paliperidone every 3 weeks, although his adherence to the trazadone is intermittent.
- The patient has a well-documented history of nonadherence to his oral medications.
- We reviewed the patient's chart and conducted an in-person interview to assess his skin-picking, which has been a daily problem for the last 3-4 years. He met the DSM-V criteria for SPD. After years of mental health treatments, the distress of his skin-picking remained unaddressed despite causing significant distress.
- We assessed our patient's skin-picking severity and impairment by using the Skin-Picking Scale-Revised[4]. His symptoms severity, impairment, and total scores were 14, 13, and 27, respectively.
- He was started on oral N-acetylcysteine 1200 mg once daily and was scheduled for follow-up visits where his SPS-R scores and potential need for dosage increase would be assessed.
- At a follow-up telephone interview 1 week after the initiation of N-acetylcysteine therapy, our patient denied improvement in his skin-picking with the starting dose. A higher dose and/or longer trial is planned to see if he may eventually respond to N-acetylcysteine.
- He will continue to have regular follow-ups.

Instructions: For each item, pick the one answer which best describes the past week. If you have been having ups and downs, try to estimate an average for the past week. Please be sure to read all answers in each group before making your choice.

(1) How often do you feel the urge to pick your skin?
0 No urges
1 Mild, occasionally experience urges to skin pick, less than 1 h/day
2 Moderate, often experience urges to skin pick, 1–3 h/day
3 Severe. Very often experience urges to skin pick, greater than 3 and up to 8 h/day.
4 Extreme, constantly or almost always have an urge to skin pick

(2) How intense or "strong" are the urges to pick your skin?
0 Minimal or none
1 Mild
2 Moderate
3 Severe
4 Extreme

(3) How much time do you spend picking your skin per day?
0 None
1 Mild, spend less than 1 h/day picking my skin, or occasional skin picking.
2 Moderate, spend 1–3 h/day picking my skin, or frequent skin picking.
3 Severe, spend more than 3 and up to 8 h/day picking my skin, or very frequent skin picking.
4 Extreme, spend more than 8 h/day picking my skin, or near constant skin picking.

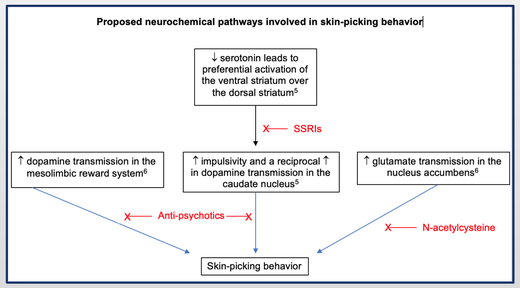
(4) How much control do you have over your skin picking? To what degree can you stop yourself from picking?
0 Complete control. I am always able to stop myself from picking.
1 Much control. I am usually able to stop myself from picking
2 Some control. I am sometimes able to stop myself from picking.
3 Little control. I am rarely able to stop myself from picking.
4 No control. I am never able to stop myself from picking.

(5) How much emotional distress (anxiety/worry, frustration, depression, hopelessness, or feelings of low self-esteem) do you experience from your skin picking?
0 No emotional distress from picking.
1 Mild, only slight emotional distress from my picking. I occasionally feel emotional distress because of my picking, but only to a small degree.
2 Moderate, a fair amount of emotional distress from my picking. I often feel emotional distress because of my picking.
3 Severe, a large amount of emotional distress. I almost always feel emotional distress because of my picking.
4 Extreme, constant emotional distress. I feel constant emotional distress and see no hope of this changing.

(6) How much does your skin picking interfere with your social, work (or role functioning)? (If currently not working determine how much your performance would be affected if you were employed.)
0 None
1 Mild, slight interference with social or occupational activities but overall performance not impaired
2 Moderate, definite interference with social or occupational performance, but still manageable.
3 Severe, causes substantial impairment in social or occupational performance.
4 Extreme, incapacitating

(7) Have you been avoiding doing anything, going any place, or being with anyone because of your skin picking? If yes, then how much do you avoid?
0 None
1 Mild, occasional avoidance in social or work settings.
2 Moderate, frequent avoidance in social or work settings.
3 Severe, very frequent avoidance in social or work settings.
4 Extreme, avoid all social and work settings as a result of the skin picking/scratching.

(8) How much skin damage do you currently have because of your skin picking? Only consider the damage produced by the behavior of picking.
0 None (no skin damage from picking)
1 Mild (Slight damage in the form of small scabs, sores, scrapes etc. Damage covers a very small area and no attempts are made to cover or treat the damage).
2 Moderate (Noticeable scars, scabs, or small open sores (< 1 cm in diameter).; Picking results in attempts to cover or treat the damage with in-home remedies (e.g., bandages, creams, ointments) that do not require the assistance of a physician
3 Severe (Large open sores (> 1 cm in diameter); Picking results in noticeable and/or noticeably disfigured skin. Picking results in extensive attempts to cover the damage and may require periodic treatment by a medical professional (e.g., prescription antibiotics, dermabrasion, etc.)
4 Extreme. (Large open wounds or craters, frequent bleeding, large scarred areas); Damage may require extensive covering and medical intervention (e.g., plastic surgery, stitches, hospitalization, etc.).



Discussion

- In previous reports of patients with skin-picking disorder and without comorbid psychosis, a beneficial effect was found once an antipsychotic was augmented with an SSRI or SNRI. These combined regimens were with paliperidone and fluoxetine, and with aripiprazole and venlafaxine. The success of one case was attributed to targeting of a hyposerotonergic, hyperdopaminergic corticostriatothalamic circuit[5,7].
- Antagonism of D_2 receptors with various antipsychotic drugs has a role and there are reports that is effective, however, as mentioned this has not proven beneficial for the skin-picking behavior of our patient with schizoaffective disorder. At one time he was being treated with both an antipsychotic and SSRI (trazadone), yet he was still picking his skin at that time.
- We felt that a combined approach using D_2 antagonism and glutamate modulation with antipsychotics and N-acetylcysteine might prove useful, as both approaches have been reported to help with schizophrenia and skin-picking behavior[8,9]. Our patient reported no benefit after 1 week at the low dose of 1200 mg daily, however, this may not represent an adequate trial.
- Medication adherence is a unique factor in the management of patients with psychotic disorders, as high rates of nonadherence in these patients has been attributed to lack of insight, medication beliefs, and substance abuse[10]. The tolerability and safety of N-acetylcysteine was a factor in our choice; however, a future trial of fluoxetine alongside D_2 antagonism may be considered to address the proposed hyposerotonergic axis.

Conclusion

- Improvement in skin-picking behaviors has been seen in patients treated with SSRIs, antipsychotics, or N-acetylcysteine. However, some cases required dual therapy; and in our literature review we have not encountered any case reports describing a benefit or specific approach to patients who a comorbid psychotic disease.
- The pathophysiology of skin-picking behavior may prove to be different in patients with a comorbid psychotic disorder. The occurrence of SPD with psychosis may be under-recognized. Additional case reports and clinical trials are needed to further determine which pharmacologic regimen may best benefit skin-picking patients with psychosis.
- Our next step is to coordinate with IRB to design a clinical trial that screens for SPD in our patients with psychotic disorders, followed by intervention as appropriate.
- **The symptom severity and distress caused by SPD was high in our patient. This case study demonstrates the importance prompt recognition and treatment of SPD in addition to treatment of Primary psychiatric diagnosis.**

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