SKIN

BRIEF ARTICLE

Psoriatic Arthritis Flare in a Hospitalized Patient with Schizoaffective Disorder: A Case Report

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ABSTRACT

Psoriasis is a known comorbid condition in patients with schizophrenia spectrum disorders. Due to the nature of these psychiatric conditions, many experience lengthy hospitalizations and self-isolate at baseline, which can make identification and management of psoriasis difficult. We report the case of a middle-aged male with a history of schizoaffective disorder and treatment-resistant psoriatic arthritis who experienced a severe flare while hospitalized. His two-month hospital stay became complicated by combative behavior and continued medication refusal, resulting in repeated seclusion events and eventual transfer to a higher acuity unit. After treatment with ixekizumab and a course of prednisone was initiated one month after admission and symptom onset, the patient's lesions were tremendously improved along with his mood on the unit. With the improvement in his chronic pain and discomfort, the patient was able to focus on mental health recovery and rapidly approached discharge. This report highlights the importance of appropriate management of comorbid conditions, especially psoriasis in patients with schizophrenia spectrum disorders needing long-term hospitalization. Additionally, this case demonstrates the successful use of ixekizumab in treatment-resistant psoriasis.

INTRODUCTION

Psoriasis is a common immune-mediated inflammatory skin condition that affects at least 1% of adults in the United States.[1] The disease ranges in severity from limited erythematous, pruritic plaques to involvement of all surfaces if left untreated. Among these patients, it is estimated that up to 41% also experience psoriatic arthritis, a progressive inflammatory arthritis that can result in permanent disability.[2] In recent years, anti-IL-17A agents such as ixekizumab and secukinumab have been shown to improve symptoms in patients with active psoriatic arthritis unresponsive to traditional first-line TNF inhibitors.[3]

In recent years, large studies have observed an increased prevalence of psoriasis in patients with schizophrenia spectrum disorders (3.3%) and broadly unspecified psychosis (35%).[4] Several studies have found that the risk of psoriasis among patients with schizophrenia is significantly higher than in those without it, possibly explained by T helper 17 (Th17) activation, the main immunological trigger of psoriasis.[5,6] Due to the nature of severe psychiatric illnesses, patient's length of stay in the hospital can vary greatly from 72-hour

holds to several months. Therefore, appropriate management of co-existing conditions like psoriasis becomes crucial.

CASE REPORT

A middle-aged male with a history of schizoaffective disorder and psoriatic arthritis was admitted to the hospital for paranoia and suicidal ideation. Historically, his psychiatric health had been maintained with valproic acid and haloperidol. However, his valproic acid level was 16 mcg/mL (therapeutic range: 50-100 mcg/mL) on admission, indicating nonadherence. It was learned that the patient had previously failed several biologic medications including TNF (adalimumab, etanercept), JAK (tofacitinib) and PDE (apremilast) inhibitors. While the arthritic component of the patient's psoriasis had been mostly stable on adalimumab for 7 months, ixekizumab had ultimately been prescribed prior to the current admission to provide better relief from his skin lesions.

Two days after admission, he began experiencing severe joint pain in his shoulders, fingers, knees, and feet. This pain was persistent and minimally relieved by acetaminophen. His course was complicated over the next two weeks by combative behavior requiring seclusion or restraints almost daily and neuroleptic medication refusal. Ultimately, the patient was transferred to a higher acuity unit.

On physical exam, several new and large erythematous plaques with scale were observed on his palmar/dorsal hands, wrists, knees, ankles, feet, and gluteal cleft in addition to limited range of motion diffusely due to chronic joint pain (PASI score: 11.1, **Figure 1a**). There was moderate pitting and discoloration of the nails; no joint deformities were appreciated.

Unfortunately, his ixekizumab had not been filled as the patient was hospitalized. As this newer medication was not on formulary at the hospital, arrangements were made for his family to fill it at a specialty pharmacy and the patient received the loading dose a month after symptom onset. A course of oral prednisone 10mg and a topical betamethasone/calcipotriene formulation were also utilized.

Two days after starting the course of prednisone, the patient began endorsing nightly auditory hallucinations involving two voices speaking to one another, causing him distress. These voices continued until the course was tapered to 5mg after a week and eventually discontinued.

Two weeks after receiving the 160mg IM loading dose of ixekizumab and completing the course of prednisone, the patient's lesions were tremendously improved and fading in all noted regions **(Figure 1b**). Importantly, his mood and irritability on the unit improved as the chronic joint pain had become manageable and he rapidly approached readiness for discharge. With this multidisciplinary effort from his dermatologic and psychiatric physicians, the patient became more receptive to continuing the former valproic acid and haloperidol regimen that had been successful for him. Within one month, he was transferred to an intensive residential treatment center where he was able to focus on mental health recovery.

DISCUSSION

This case demonstrates the importance of appropriate management of comorbid conditions, especially psoriasis in patients with schizophrenia spectrum disorders needing long-term hospitalization. Timely

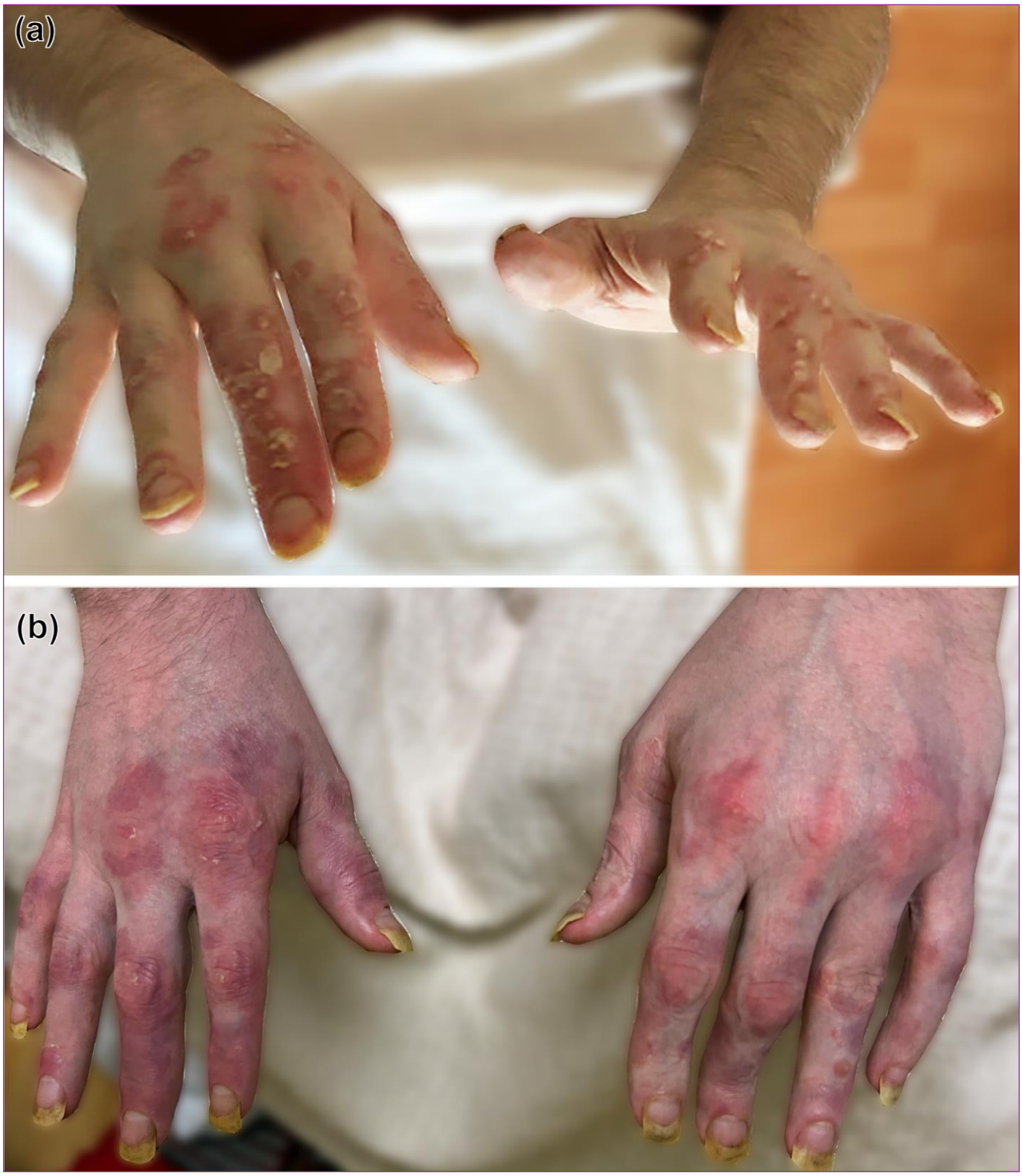

Figure 1. Numerous erythematous plaques with scale on the dorsal surface of the patient's hands one month after admission (**a**), which improved two weeks after initiating treatment (**b**).

care is crucial to limit unnecessary suffering and extended hospital stay in these patients. Appropriate treatment may even promote medication adherence overall and limit future hospitalizations for both their dermatologic and psychiatric conditions. This may be more challenging in cases involving behavioral volatility, seclusion or restraint placement, floor transfers and extensive self-isolation such as in the one presented. Therefore, effective interdisciplinary communication becomes paramount and clinicians should ensure that investigation into the causes of patient discomfort are not limited to within their psychiatric diagnoses.

The benefit on both the psoriatic joint pain and extensive plaques from the 2016 FDA approved biologic ixekizumab was noted in our patient, lasting beyond the effects of the prednisone burst. Ixekizumab is a selective inhibitor of IL-17A indicated for moderate to severe plaque psoriasis that has been shown to be equal or superior to other biologic therapies in efficacy, patient adherence and cost.[7] While a recent retrospective study found both ixekizumab and the similar IL-17A antagonist secukinumab to be highly effective for the short and long-term treatment of psoriasis, further studies exploring the efficacy of these medications in treatment-resistant patients is needed.[8] Both medications have the benefit of monthly IM dosing, an important consideration in patients with history of inconsistent adherence.

In this case, the patient also experienced new auditory hallucinations beginning 2 days after initiating prednisone which continued until the course was tapered and eventually discontinued. While the overall prevalence of severe neuropsychiatric symptoms (psychosis, mood fluctuations) in those receiving glucocorticoids has been estimated to be 6%, patients in this population may be more susceptible.[9]

CONCLUSION

In conclusion, clinicians caring for patients with schizophrenia spectrum disorders, particularly in cases requiring long-term hospitalization should be aware of the increased prevalence of psoriasis in this population to prevent delays in treatment. Care should be taken to ensure that irritability, self-isolation and other related behaviors are not always assumed to be linked to their psychiatric diagnoses. Additionally, anti-IL-17A agents such as ixekizumab can provide significant relief for psoriatic arthritis patients that have failed previous treatments.

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