Abstract N°: ID-1255

Topic: Inflammatory skin diseases

Successful Treatment of Pyoderma Gangrenosum Associated with Ankylosing Spondylitis and SAPHO Syndrome with Upadacitinib: A Case Report

Gülce Naz Baysu*[1], Muazzez Çiğdem Oba[1], Hande Saygılı Öğün[2], Alican Karakoç[2], Gülen Hatemi[2]

[1]İ.Ü. Cerrahpasa Medical Faculty, Dermatology, Fatih, Türkiye
[2]İ.Ü. Cerrahpasa Medical Faculty, Department of Internal Medicine, Division of Rheumatology, Fatih, Türkiye

Introduction

Pyoderma gangrenosum is a chronic neutrophilic dermatosis characterized by painful, rapidly progressive cutaneous ulcerations which is associated with systemic inflammatory diseases (most commonly inflammatory bowel disease, arthritis, monoclonal gammopathies, and other hematologic disorders). Increasing evidence suggests that dysregulation of both innate and adaptive immune responses—particularly involving the Th1/Th17 axis and the JAK/STAT signaling pathway—play a key role in pathogenesis. Management of pyoderma gangrenosum can be challenging, especially in patients with multiple comorbidities and refractory disease. Recently, JAK inhibitors, including the selective JAK1 inhibitor upadacitinib, have emerged as promising therapeutic options by targeting multiple proinflammatory cytokine pathways. This report aims to evaluate the clinical response of refractory pyoderma gangrenosum associated with ankylosing spondylitis and SAPHO syndrome to treatment with upadacitinib and describe the
long-term safety and durability of clinical remission.

Materials and Methods

We report a single-case of pyoderma gangrenosum ocurring in a patient with ankylosing spondylitis and SAPHO syndrome.

Clinical, laboratory, histopathological and treatment data were retrospectively collected from medical records. Therapeutic response to upadacitinib was evaluated through serial clinical examinations assessing the ulcer size and pain intensity, and routine laboratory monitoring during long-term follow-up.

Results

A 39-year-old woman with a history of ankylosing spondylitis and SAPHO syndrome, as well as celiac disease, hypothyroidism and hypertension, was initially evaluated in 2021 for recurrent sternoclavicular synovitis, diffuse truncal acne, and elevated erythrocyte sedimentation rate, leading to a diagnosis of SAPHO syndrome.
She had previously received multiple systemic therapies, including sulfasalazine, systemic corticosteroids, certolizumab pegol, and secukinumab, with inadequate disease control.
In October 2024, the patient developed a small, painful, erythematous swelling on the posterior aspect of the right lower leg, which rapidly enlarged and progressed into an exudative ulcerative lesion within approximately one month. Despite having received multiple courses of systemic antibiotics and topical therapies prior to histopathological confirmation, the size of the ulcer continued to increase. Subsequent histopathological examination of a skin biopsy was consistent with pyoderma gangrenosum.
Upadacitinib 15 mg/day was initiated. During approximately 18 months of follow-up, the patient achieved complete clinical remission of pyoderma gangrenosum,without any recurrence or treatment-related adverse events.

Conclusions

This case highlights the potential effectiveness of selective JAK1 inhibition with upadacitinib in the management of pyoderma gangrenosum associated with ankylosing spondylitis and SAPHO syndrome. In a patient with multiple inflammatory comorbidities, upadacitinib was associated with sustained clinical improvement and long-term disease control. These findings support the emerging role of upadacitinib as an effective and well-tolerated therapeutic option in pyoderma gangrenosum and underscore the need for further studies to better define their long-term efficacy and safety in this setting.