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CASE REPORT

A Case of Moderate Hidradenitis Suppurativa and Psoriasis Treated with Secukinumab

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Hidradenitis suppurativa (HS) is a disorder of the apocrine gland causing a chronic, recurrent and painful inflammation. It is a disabilitating condition and, though many therapeutic options are available, the response is often ineffective in most cases and patients can present many recurrences with physical and psychological sequelae. Recent data had shown increased interleukin (IL)-17 serum levels in patients with HS. Psoriasis is a chronic immune-mediated inflammatory disorder and new evidences have shown the role of Th17 cells in its pathogenesis and the therapeutic efficacy of anti-IL-17 antibodies. We present a case of a patient suffering from psoriasis and HS successfully treated with anti-IL-17 antibodies for both conditions. This is the first case report of HS treated with secukinumab. **(Ann Dermatol 30(4) 462～464, 2018)**

-Keywords-
Hidradenitis suppurativa, Interleukin-17, Psoriasis

INTRODUCTION

Hidradenitis suppurativa (HS) is a disorder of the terminal follicular epithelium in the apocrine gland–bearing skin, characterized by a chronic, recurrent and painful inflammation in areas of the apocrine sweat glands, most commonly the axillary, inguinal, and anogenital regions.
It is a disabilitating chronic inflammatory disease with major negative impact on quality of life and significant comorbidities.
Though many therapeutic options are available, the response is inadequate in most cases and patients can present many years of recurrent outbreaks that have major physical and psychological sequelae.
Recent publications confirm the presence of increased interleukin (IL)-17 serum levels in patients with HS and there is a base for treatment with secukinumab[1].
We successfully treated a patient with HS and psoriasis. This is the first case report of HS treated with secukinumab.

CASE REPORT

A 37-year-old white man was referred to the Department of Dermatology, University of Palermo (Italy) with a twenty-years history of psoriasis and eleven of HS.
He had received many treatments with several systemic agents: a combination of Rifampicin and Clindamycin and Cyclosporine with poor response. From April 2015 to September 2016, the patient received infliximab infusions (5 mg/kg) with partial improvement of both diseases and frequent recurrences.
In November 2016, skin examination revealed erythematous plaques with sharp boundaries and covered with pearlescent squamae on the trunk and extremities in a generalized distribution (Fig. 1A, B).

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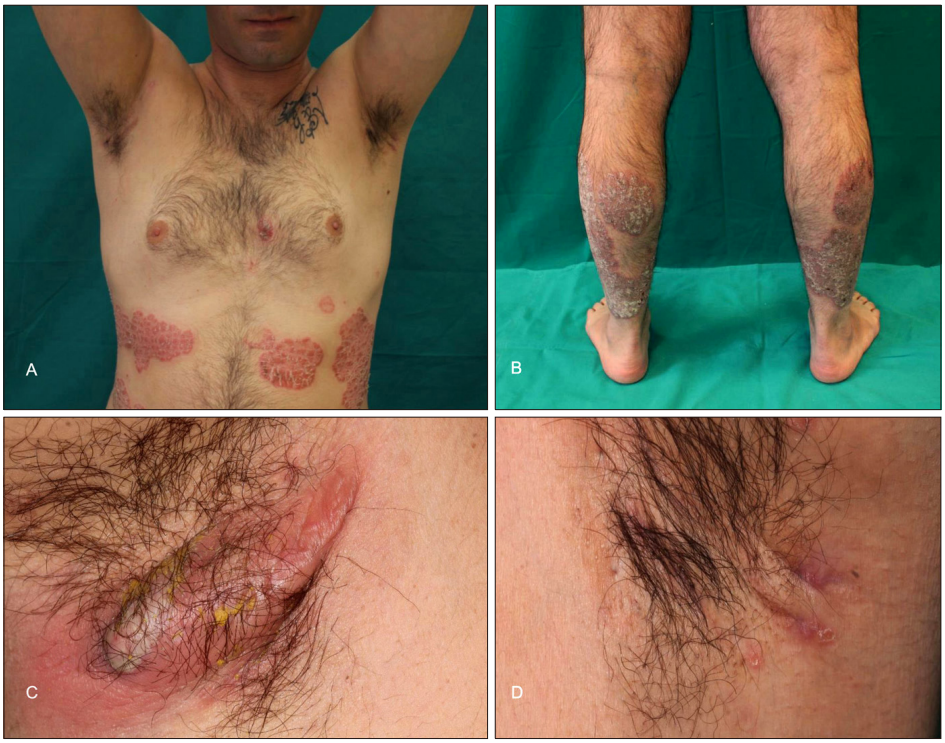

Fig. 1. (A, B) Erythematous plaques covered with squamae on the trunk and extremities; (C) reddish painful abscesses with a sinus tract of the right axilla; (D) erythematous lesions with hypertrophic scars at the left axilla.

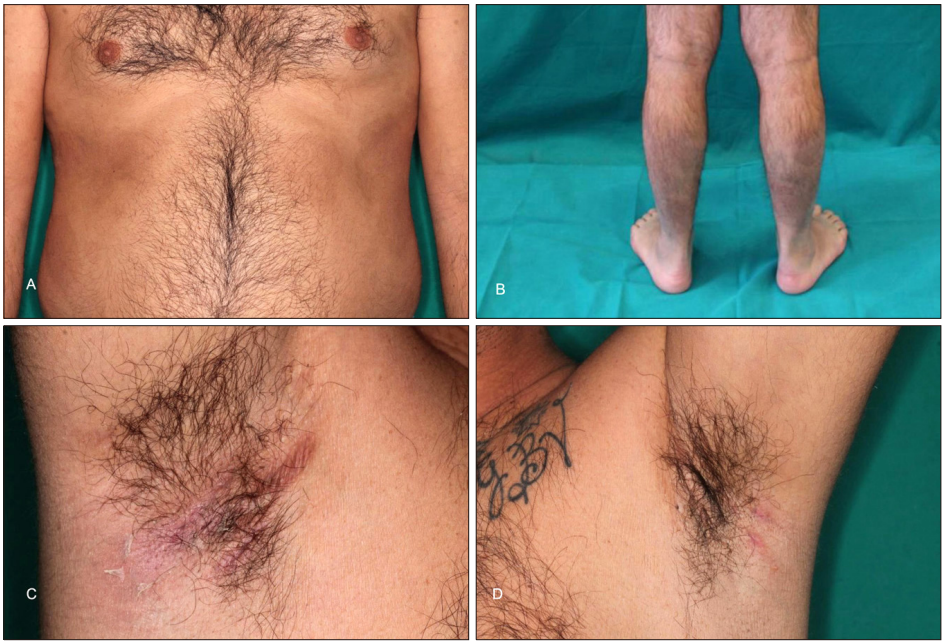

Fig. 2. (A～D) Regression of the abscesses and improvement of psoriatic lesions.

In the right axillary region were found reddish painful abscesses with a sinus tract (Fig. 1C). The lesions caused considerable pain, resulting in severe discomfort and a substantial negative effect on quality of life. Slightly raised erythematous lesions with hypertrophic scars were present at the left axilla. The patient had secondary stage of HS according to the Hurley staging system (Fig. 1D).

Before treatment, the patient underwent comprehensive laboratory investigations, including complete blood cell count; chemistry panel; tuberculosis (Quantiferon-TB Gold test; Cellestis Limited, Carnegie, VIC, Australia), human immunodeficiency virus, and hepatitis B and C screening; and chest X-ray.

After comprehensive information he received the first sub-

cutaneous injection of secukinumab according to the psoriasis regimen, 300 mg subcutaneously in weeks 0, 1, 2, 3, and 4 and every 4 weeks thereafter. Within two weeks there was a good reduction in inflammatory activity with regression of erythema, pain and flattening of abscesses as well as a significant improvement of psoriasis skin lesions (Fig. 2).

DISCUSSION

Both HS and psoriasis are considered chronic inflammatory diseases due to immune dysregulation. The high prevalence of psoriasis patients diagnosed with HS suggests the existence of common pathogenic links[2].

The pathogenesis of HS is complex and it remains unclear. Genetic factors, hormones, smoking, obesity, bacterial infection, and alteration of antimicrobial peptides that regulate cutaneous innate immunity, have been implicated. Recent studies revealed increased expression of a broad range of cytokines in lesional HS skin, including IL-17[3]. Psoriasis is a chronic immune-mediated inflammatory disorder and new evidences revealed a role of Th17 cells as proximal regulators of psoriatic skin inflammation; the therapeutic efficacy of IL-17 blockade has provided clinical confirmation of the central role of this cytokine in the pathophysiology of psoriasis. Recent studies revealed an increased number of IL-17-producing cells and IL-17 expression in lesional and perilesional skin of patients with HS and psoriasis[4]. The use of systemic biologic therapy with anti-tumor necrosis factor (TNF)-alfa has shown a favorable safety profile in the treatment of plaque psoriasis and psoriatic arthritis, preventing the articular disability, through an early diagnosis[5,6]. The new molecule secukinumab, is a fully human monoclonal immunoglobulin G1 κ antibody that selectively inhibits the ligand IL-17A and its downstream effects by preventing it from binding to the IL-17 receptor[7]. Considering that IL-17 acts synergistically with TNF-alfa, and that HS and psoriasis are associated with metabolic syndrome with increased risk for development of cardiovascular disease, the use of anti-IL-17 agents in the treatment of our patients is justified[8]. Therefore, secukinumab represents a new therapeutic option for patients with recalcitrant HS.

CONFLICTS OF INTEREST

The authors have nothing to disclose.

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