Subcorneal Pustular Dermatosis associated with psoriasis vulgaris — acitretin treatment

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TO THE EDITOR

Subcorneal pustular dermatosis (SPD), also known as Sneddon-Wilkinson disease is rare pustular dermatosis which commonly affects middle aged women. We would like to present a case of a 64-year-old woman presented to our department with an annular pustular rash of 5 days duration. The skin lesions occurred simultaneously with an upper airways infection. Initially she was treated with Amoxicillin with Clavulanic acid and Clobetasoli Propionas prescribed by primary care physician. The patient had been suffering from mild psoriasis vulgaris since the age of 19 and psoriatic arthritis since 2015.

On examination several flaccid pustules arising from erythematous skin were localized on the trunk and proximal extremities, the ruptured pustules formed areas of desquamation (Fig. 1, 2). In close proximity to the pustules, polycyclic erosions with erythematous haloes were present (Fig. 3). Patient also reported pruritus of the lesions and a mild dry cough. No other symptoms were reported. Full blood count, ESR, CRP, urine examination, renal and liver function were normal. Serum electrophoresis did not reveal any abnormalities. Histologic examination revealed neutrophilic infiltration of the subcorneal layer of the epidermis, perivascular infiltrates with neutrophils and acantholysis. Infectious agents were absent. General physical examination was normal. Based on the clinical and histopathological findings a diagnosis of subcorneal pustular dermatosis of Sneddon and Wilkinson was made.

The patient was started on Acitretin 50 mg/day and the lesions cleared within two weeks. During the follow up patient reported dizziness and fatigue during the treatment. Postinflamatory pigmentation remained in the place of lesions. Due to that fact, we reduced dose of



Figure 1. Erythematous areas of desquamation formed by ruptured pustules localized on the abdomen and proximal extremities



Figure 2. Erythematous areas of desquamation formed by ruptured pustules localized on the lumbar region and proximal extremities

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Figure 3. In close proximity lesions presents as polycyclic erosions with erythematous haloes

Acitretin to 25 mg/day and 10 mg/day. At three months follow-up, patient remains free of disease without any side-effects.

Subcorneal pustular dermatosis (SPD) is a chronic benign, rare, recurrent, neutrophilic dermatosis originally described in 1956 by Sneddon and Wilkinson [1]. Its diagnosis is based on clinical and histopathological findings. Clinically, SPD presents symmetrically as flaccid hypopyon pustules, arising on normal-appearing skin or appears overlying erythematous or inflamed skin which can form annular patterns. It can be localized on the trunk, intertriginous regions, and flexor region of the extremities. Histologic examination reveals subcorneal accumulation of neutrophils and perivascular infiltrates with neutrophils; acantholysis may be observed in older SPD lesions. The differential diagnosis includes IgA pemphigus impetigo, pustular psoriasis, pemphigus foliaceus, dermatitis herpetiformis, and AGEP [2]. Dapsone 50-200 mg/day remains the first-line treatment for SPD [3]. Oral retinoids, such as acitretin have been used successfully with the effectiveness comparable to that of dapsone, with quicker decline in symptoms and better tolerability [4]. Debatable is the fact whether SPD and pustular psoriasis are the same disease or two separate entities. Clinically they present with flaccid pustules which can spread into circinate or annular arrangements. Both can be associated with systemic diseases and drug-induced cases. Acitretin have been successfully used to treat SPD as annular pustular psoriasis. The hypopyon pustules which occur in SPD have not been described in pustular psoriasis. Increased findings of spongiosis, systemic symptoms and a higher incidence of childhood cases in annular pustular psoriasis can be differing factor. It is suggested that since SPD is nearly indistinguishable from the annular form of pustular psoriasis, it should be reclassified as additional variant of pustular psoriasis. Nevertheless further research is needed to eliminate any source of disagreement [2].

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