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CASE REPORTS

# Psoriasis in a patient with dermatomyositis

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Psoriasis has been consistently associated with arthritis and inflammatory bowel diseases, though there have been reports on patients with psoriasis and other autoimmune dermatoses. Sometimes, sharply demarcated scaly plaques located over extensor surfaces in patients with dermatomyositis may clinically resemble psoriatic lesions. Histologic findings of interface dermatitis, typical for dermatomyositis, help clinicians to rule out psoriasis. A patient is presented with dermatomyositis in which psoriatic lesions developed over the extremities and lower trunk. Histological examination confirmed the diagnosis of psoriasis. Both diseases have run independent courses. It is prudent to include psoriasis in the differential diagnosis of scaly eruptions occurring in dermatomyositis patients.

Keywords: psoriasis; dermatomyositis; diagnosis.

#### Introduction

Dermatomyositis is chronic autoimmune inflammatory disease involving the skin and skeletal muscles (1). The disease process is mediated by autoreactive T cells, which recognize autoantigens expressed on myocytes of striated muscles (2). Cutaneous lesions are thought to arise from ultraviolet light-induced apopotosis of keratinocytes with subsequent translocation of previously sequestered cellular antigens that then activate the immune system (3). Psoriasis, a chronic inflammatory T cell-mediated skin disease, might also represent an organ-specific autoimmune disorder (4). It is well known that dermatomyositis as well as psoriasis can occur simultaneously with other autoimmune diseases, yet, an extensive literature search could not retrieve a single report on concurrent occurrence of said diseases. A case of a patient with dermatomyositis, in whom cutaneous lesions clinically and histologically proven as psoriasis developed, is presented in this paper.

#### Case report

Sixty-three year old man was referred to our outpatient dermatology service for erythematous and scaly cutaneous plaques. Four years ago a diagnosis of dermatomyositis had been established on the basis of clinical presentation, level of muscle enzymes elevation, electromyographic and muscle biopsy findings. His medical files contained descriptions of periorbital erythema and Got-

tron's papules over his fingers at the time of the diagnosis. His family history was negative for psoriasis and other autoimmune diseases. The treatment consisted of oral methylprednisolone (1 mg/kg/day) and azathioprine (2 mg/kg/day), with gradual dose lowering as soon as clinical remission was achieved. A month ago he noted asymptomatic red scaly plaques around his elbows, knees, and on the lower back. On presentation he was free of muscle weakness and was administered methylprednisolone 8 mg every other day, and azathioprine 50 mg/day. Numerous erythematous and scaly oval plaques were seen, distributed over his elbows, knees, flanks, lower back, thighs, shins, and upper arms (Figure 1).

The Auspitz sign was positive upon scraping the lesions. Nails and scalp were free of lesions and he did not have any articular disorders. A lesion was biopsied and histopathologic findings were consistent with psoriasis (Figure 2). The patient was given topical steroids and keratolytic agents and the lesions cleared in several weeks. Subsequent mild flare-ups were well controlled with midpotency topical steroids, and later with topical calcipotriol. The patient has remained in a stable remission.

#### Discussion

Psoriasis has been consistently associated with arthritis, whereas it occurs more frequently than expected among patients with inflammatory bowel diseases (5). There have been case reports on patients with psoriasis and other

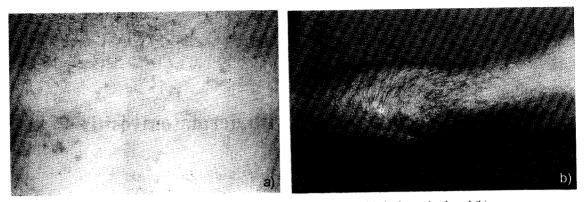


Figure 1. Erythematous and scaly oval plaques located on (a) the lower back and (b) arm.



**Figure 2**. Parakeratosis, Munro's microabscesses, acanthosis and dilated dermal capillaries surrounded by inflammatory infiltrate composed of lymphocytes and neutrophils (H&E, × 100).

autoimmune diseases, including cutaneous disorders like lichen planus, vitiligo, alopecia areata, and acquired bullous dermatoses. However, larger studies failed to show any significant association between psoriasis and other autoimmune diseases apart from the above-mentioned arthritis and inflammatory bowel diseases (6, 7). Cutaneous lesions in dermatomyositis are diverse and psoriasis needs to be considered in clinical differential diagnosis (1, 8). This is particularly valid for scalp lesions, and for lesions located on the elbows, knees, buttocks, and extensor aspect of the upper extremities, which may be well-marginated plaques covered with fine silvery scale (1, 8). However, as in this patient, histological findings are usually conclusive and make it possible to arrive at a precise diagnosis. Both diseases have obviously run separate courses in the patient without any significant mutual impact. The single case report does not support any relationship between these diseases, but may alert dermatologists to consider psoriasis in the differential diagnosis of cutaneous changes in dermatomyositis.

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## **Apstrakt**

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### PSORIJAZA KOD BOLESNIKA SA DERMATOMIOZITISOM

Za psorijazu je nedvosmisleno ustanovljena povezanost sa artritisom i zapaljenjskim bolestima creva, dok su znatno ređa saopštenja o istovremenoj pojavi psorijaze i drugih autoimunskih oboljenja kože. Ponekad oštro ograničene ploče sa deskvamacijom smeštene na ekstenzornim površinama kod bolesnika sa dermatomiozitisom klinički podsećaju na psorijazu. Međutim, histološki nalaz lihenoidnog dermatitisa, karakterističnog za dermatomiozitis, omogućava kliničaru da isključi psorijazu. Opisujemo bolesnika sa dermatomiozitisom kod koga su se pojavile psorijazne promene na ekstremitetima i donjem delu trupa. Histološkim pregledom isečka kože uzetog sa promene potvrđena je psorijaza. Obe bolesti imale su nezavisan tok. Preporučljivo je uključiti psorijazu u diferencijalnu dijagnozu eritemoskvamoznih ospi kod bolesnika sa dermatomiozitisom.

K lj u č n e r e č i : psorijaza; dermatomiozitis; dijagnoza.