INTRODUCTION

Verrucous psoriasis is an uncommon variant of psoriasis characterized by the presence of hypertrophic verrucous papules or plaques in pre-existing psoriasis plaques. The warty appearance of the lesions can often be confused with dermatosis such as verruca vulgaris. These cases have so far been reported in patients with longstanding plaque psoriasis. A skin biopsy with histopathology correlation is warranted to exclude other dermatoses.

We report a case of verrucous psoriasis seen on lower extremities in a patient with pre-existing plaque psoriasis and a review of the relevant literature.

CASE REPORT

A 51 year old Malay male was on follow-up at our Centre for extensive chronic plaque psoriasis spanning 9 years. He was initially treated with acitretin and narrowband-UVB (NBUVB) but due to poor clinical response was later switched to methotrexate. His condition had also been complicated with psoriatic arthropathy involving the small joints of the hands for the last 3 years. Despite systemic treatment and optimum topical therapy, he had gradually became erythrodermic, with flexion deformities of his distal interphalangeal joints bilaterally.

A year ago he developed symmetrical, moderately thick warty brownish hyperkeratotic plaques occurring on pre-existing psoriatic plaques on the dorsum and soles of both feet (Figures 1 & 2). These lesions failed to respond to escalating doses of methotrexate. They were asymptomatic but were progressively growing, causing significant physical dis-figurement and discomfort on wearing shoes. There was absence of non-pitting leg oedema to suggest systemic causes for the skin appearance.

Histopathology examination revealed digitate papillomatosis with surface erosions and neutrophilic exudates with microabscesses (Figures 3 & 4). There was parakeratosis with corresponding hypogranulosis. The epidermis was grossly acanthotic with psoriasiform hyperplasia of the rete ridges (Figure 5). There was papillary dermal edema with dilated capillary loops and superficial lymphocytic perivascular exudates. PAS staining was negative for fungal bodies. These changes were consistent with verrucous plaque psoriasis.

He was commenced on ustekinumab shortly afterwards, which resulted in clearance of his verrucous plaques as well as improvement in his psoriasis after 2 doses.

DISCUSSION

Psoriasis is a T-cell mediated immune with subtypes defined as plaque, guttate, flexural or inverse, pustular and erythrodermic psoriasis. Verrucous psoriasis was initially considered to be a more severe form of plaque psoriasis rather than a separate entity. It has now been accepted as a clinical variant of psoriasis. It has not shown to have any particular site of predilection and can occur by itself as well as in patients with pre-existing psoriasis vulgaris. Clinically the lesions appear warty and hypertrophic. In our patient, the verrucous appearance of the feet also resembled mossy foot, a term used in conditions with chronic lymphatic obstruction such as elephantiasis where the lesions are grossly papillomatous[1]. The differential diagnoses of verrucous psoriasis include verruca vulgaris, inflammatory linear verrucous epidermal naevus while verrucous carcinoma has to be ruled out.

The aetiology of verrucous psoriasis is unknown. It has been postulated to occur from obstruction in the lymphatic drainage leading to the development of extensive cutaneous papillomatosis giving rise to the warty appearance[2,3]. The occurrence of verrucous lesions during immuno-suppressive therapy with methotrexate is yet to be described and we believe this is the first case of its kind. A similar case of verrucous skin eruptions in a patient with hepatitis C during interferon treatment may support the theory that ongoing immunosuppressive therapy may promote and lead to the development of verrucous psoriasis[3].

As our patient was suffering from erythrodermic psoriasis with psoriatic arthritis, we had decided on biologic therapy using ustekinumab, a monoclonal antibody which targets interleukin 12 and 23.

This case report illustrates a rare and atypical manifestation of psoriasis in a patient with erythrodermic psoriasis despite being on systemic immunosuppressive therapy. Verrucous lesions often reflect poor control of the underlying psoriasis and helps to guide clinical decision making with respect to therapeutic management options.

REFERENCES


**The authors declare that there is no conflict of interests.**