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CASE REPORT

Puvasol Induced Bullous Pemphigoid In A Case Of Psoriasis

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ABSTRACT

Psoriasis is a chronic scaly disease of unknown aetiology. There are many theories for its causation and similarly there is no cure for it. There are multiple therapies for its treatment yet the results are different for different patients. A 60-years-old male suffering from Psoriasis for decades developed Bullous Pemphigoid after the initiation of PUVASOL therapy.

Keywords: Psoriasis, Bullous Pemphigoid, Puvasol

Introduction

Psoriasis is a chronic papulosquamous disorder. Seborrheic dermatitis, lichen simplex chronicus and lichen planus may co-exist or alternate with psoriasis. Other reported cutaneous associations include Pemphigoid, Neurofibromatosis, Actinic reticuloid, Peutz-Jeghers syndrome, Vitiligo, Lupus erythematosus, and viral warts.[1]

Bullous pemphigoid (BP) was apparently precipitated in many cases by therapy for psoriasis viz. PUVA, UVL and tar, UVL and anthralene.[2]

Association of Pemphigus and Hailey-Hailey disease[3], Linear IgA bullous dermatosis[4] and Epidermolysis bullosa acquisita[5] has also been reported.

We report a case of psoriasis who developed BP following Puvasol therapy and discuss the various views on pathogenesis of bullous disorders in psoriasis patients. This report highlights the importance to be aware of adverse effects of commonly use medications (Methoxypsoralen), which even a GP would prescribe.

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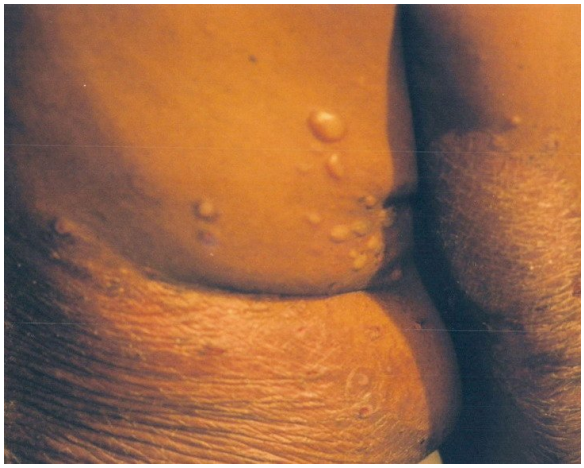
Case Report

A 60-year-old male, suffering from psoriasis presented with blisters all over the body for one month. The patient was apparently well 16 years ago when he was diagnosed as suffering from psoriasis for his scaly skin patches. He underwent various treatment plans since, including local application of coal tar, dithranol and even oral methotrexate with remissions and relapses as is usual with psoriasis.

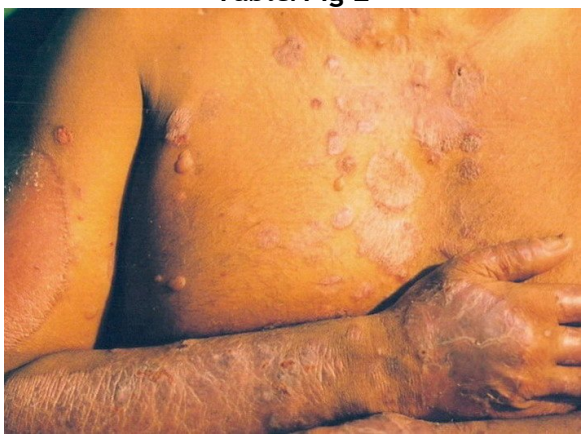
The patient had been receiving 20 mg of 8-methoxypsoralen followed by sun-exposure for nearly two weeks when he developed vesiculobullous lesions on the anterior abdominal wall which later spread all over the body in a period of one week.

On cutaneous examination the patient had multiple well-defined erythematous plaques with micaceous scaling on extensor aspect of upper and lower limbs, anterior abdominal wall, lumbosacral region [Table/Fig 1] and scalp. Auspitz sign was positive in these plaques. Multiple discrete bullae were also present on abdominal wall, back, upper and lower limbs[Table/Fig 2]. The bullae were tense and bulla spreading sign was positive, however Nikolsky's sign was negative. Scalp, face, mucous membranes, palms, soles and nails were spared. On per rectal examination prostate was found to be normal in size and consistency.

Table/Fig 1



Table/Fig 2



Blood sugar, urea, liver function tests, kidney function tests and acid phosphatase levels were within the normal limits. His Hemoglobin was 10.9 gm percent, total leucocyte count as 10,200 per cu mm. Polymorphs were 68 percent, lymphocytes 30 per cent, eosinophils 2 per cent. Erythrocyte sedimentation rate was 20 mm in first hour. Stool examination for occult blood and urine examination were normal. VDRL was non-reactive. Skiagram of chest and Ultra sonogram of abdomen were normal.

Tzanck's preparation did not show acantholytic cells, instead eosinophils were present. Skin biopsies from bullous and scaly lesions were consistent with sub epidermal split with eosinophilic infiltrate and psoriasis respectively. Electron microscopy and direct immunoflouroscence from perilesional skin around bullae confirmed the diagnosis of BP.

The patient was put on oral antibiotics and prednisolone along with supportive therapy. The plaques and bullae started resolving from the 6th day of the institution of treatment and resolved completely within two weeks. Prednisolone was tapered off over a period of 4 weeks under the cover of methotrexate 15 mg once a week in 3 divided doses.

Discussion

The association between psoriasis and BP may be more than coincidental. Grattan[6] reported an increased incidence of psoriasis in BP patients unrelated to therapy in a retrospective case control study, he reviewed 62 cases of BP, most confirmed by immunopathology; and 62 cases of leg ulcers as controls. He found that psoriasis occurred in 11 per cent of BP cases and in none of the controls.

Carla[7] reported a case of Pemphigus herpetiformis in a patient with psoriasis who was receiving UVB therapy.

The exact role of UV light in the induction of BP is unknown. It is quite a possibility that intense UV light therapy may induce alteration of normal human structures creating antigens to which the host responds with auto antibodies. It is thought that the blisters may arise as a result of immunological response of the host against UV altered basement membrane zone (BMZ)[2].

Changes at the BMZ in psoriasis may be responsible for heterogenous antibody response and may trigger the bullous disease, as may antipsoriatic treatment, including tar and UV radiation. However, common immunogenetic mechanisms may play a crucial part in this disease association.[8]

A term "psoriasis bullosa acquisita" was suggested for patients with circulating auto antibody targeted against a skin component closely associated with type VII collagen.[9]

Although BP has been reported to be induced by sun exposure in one case[3], it could not be ascertained whether our patient developed BP as a result of insult by sun exposure or sun exposure combined with oral psoralen therapy. The cases described earlier had psoriasis for decades prior to onset of BP[3]and so did our patient who had psoriasis for 16 years and was

undergoing PUVASOL therapy when he developed BP.

Possibilities of malignancy or any other vesiculobullous disorder in this patient were ruled out by ultrasonography, histopathology and electron microscopy respectively.

This case is being reported due to the rare coincidence of psoriasis and BP. with all probability precipitated by PUVA-SOL therapy; and to the best of our knowledge there has not been any report of such a case from India so far. Methoxypsoralen combined with solar ultraviolet light is commonly used therapy in India where there is lot of Sunlight all time round the year, this case highlights the fact that we should be prepared to see these kind of side effects with PUVASOL therapy, however rare it may be.

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