



BULLOUS PEMPHIGOID ASSOCIATED WITH SQUAMOUS CELL CARCINOMA OF THE TONGUE-A RARE CASE REPORT

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ABSTRACT

Bullous pemphigoid is an acquired non-scarring autoimmune blistering disease of the elderly age group characterized histologically by presence of subepidermal bullae and immunopathologically by deposition of complement and antibodies along the epidermal basement membrane zone (BMZ). It has been associated with the various malignancies especially of the gastrointestinal tract. We report a case of Bullous pemphigoid associated with squamous cell carcinoma of the tongue in a 50 years male who presented with complaints of multiple fluid filled lesions over both the arms, trunk, back and both the legs with growth in the tongue for the past 1 year.

INTRODUCTION

Lever, in 1953 [1], coined the term “Bullous pemphigoid” for a blistering disorder that was clinically similar to pemphigus but histologically lacked the typical acantholysis. A decade later, the presence of antibodies against basement membrane zone was demonstrated by Jordan *et al* [2]. It commonly affects the elderly people with the onset after 60 years of age with mean of 80 years. Various agents and conditions have been reported to be causative or associated with the occurrence of bullous pemphigoid including drugs, psoralen/ultraviolet A chemotherapy, psoriasis, diabetes mellitus, nephropathy, multiple sclerosis, ulcerative colitis and internal malignancies especially of the gastrointestinal tract.

CASE REPORT

A 50 years old male presented to our OPD with complaints of itchy skin lesions all over the body for the past 1 week. After one week, he developed multiple fluid filled lesions over the arms, shoulder, groin and both the legs. The blister stayed for three days and then ruptured. No history of loss of weight or appetite. There was no history of erythematous raised lesions. There was no

history of drug intake prior to the onset of lesions. No history of photosensitivity. There was no history of diarrhea, abdominal pain. There was no history of aggravations of lesions on intake of foods. There was no history of trauma prior to the onset of the lesions. There was history of growth in the tongue which was initially small and which gradually started progressing in size to attain the present size and associated with history of difficulty in swallowing foods. There was history of swelling over the right side of neck. The swelling was small and started gradually progressing to attain the present size. No history of pain. No history of trauma. No history of fever, night sweats.

Dermatological examination revealed multiple erosions and blisters present over the flexor aspect of both the arms and medial aspect of both the thighs. [Figure 1]. Nikolsky sign and bulla spreading sign was negative. Oral mucosa shows multiple erosions with erythematous papules and plaque of size 4×3 cm present over the lateral aspect of the tongue with presence of 4× 4 cm submandibular lymph node, hard in consistency, non tender over the right side of neck. [Figure 2]. Scalp, palms,



soles, nail and genitalia were normal. Systemic examination was normal. Complete blood counts done were normal. Tzanck smear shows no acantholytic cells and few eosinophils. Punch biopsy taken from the left forearm revealed subepidermal bulla containing eosinophilic fluid and eosinophils and dermis with

inflammatory cells. [Figure 3]. Biopsy from the tongue shows hyperplastic stratified squamous epithelium with ulceration overlying neoplasm composed of islands and nests of dysplastic squamous epithelium infiltrating the surrounding stroma. [Figure 4]. The patient was referred to oncologist for further management.

Figure 1. Clinical photograph showing multiple erosions and blisters present over the flexor aspect of left forearm and medial aspect of both the thighs.

Figure 1 A.



Figure 1 B.



Figure 2. Clinical photograph showing multiple erosions with erythematous papules and plaque of size 4x3 cm present over the lateral aspect of the tongue.



Figure 3. Haematoxylin and eosin (H&E) section of the skin photograph showing subepidermal bulla containing eosinophilic fluid and eosinophils and dermis with inflammatory cells. A. (Magnification x 40) and B. (Magnification x 10)

Figure 3A.

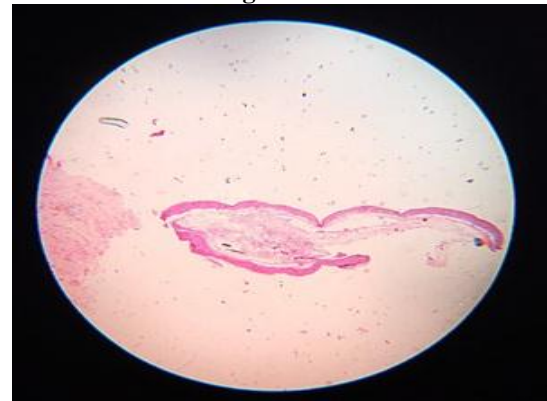


Figure 3B.

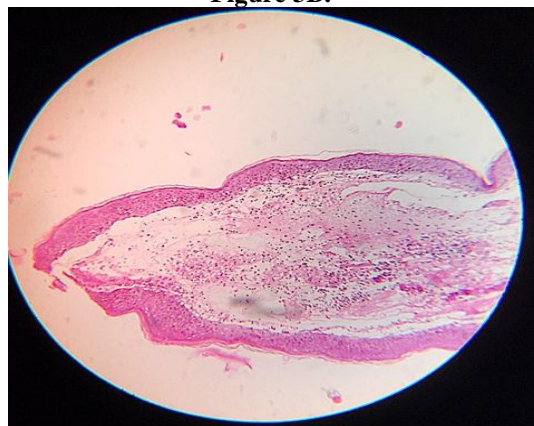
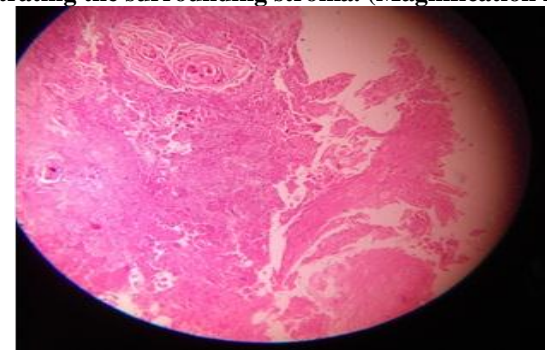


Figure 4. Haematoxylin and eosin (H&E) section from the tongue shows hyperplastic stratified squamous epithelium and nests of dysplastic squamous epithelium infiltrating the surrounding stroma. (Magnification x 40)



DISCUSSION

Bullous pemphigoid (Syn: Pemphigoid) commonly starts with itching and a non-specific rash on the limbs that may be either urticarial like or eczematous. The urticarial prodrome usually lasts 1-3 weeks before blisters occur and eczematous prodrome may precede the blisters by several months. Sudden generalization of the true eruption of bullous pemphigoid follows the prodrome phase and most of the body is affected within a week. It is manifested as tense blisters, hemorrhagic or filled with thick fibrinous fluid on normal appearing skin or on an erythematous base. The blisters range from vesicles to large bullae and may be seen all over the body, the commonest sites of involvement being the flexor aspects of the limbs and the lower abdomen, inner thighs, groin. Vesicles may also develop on the palms and soles. Nikolsky's sign is negative. The erosions heal without scarring, but transient pigmentary changes and milia formation can occur. In a less common form of BP, patients may have no bullae, and present with erythematous macules, papules, urticarial plaques and rarely erythroderma. Pruritus is generally present, but the degree is variable, ranging from none to intense. Rarely, severe pruritus may precede skin lesions by years. Mucosal lesions have been reported in 10%–40% of patients but are rarely the presenting feature. They are often mild and transient usually restricted to the oropharynx and tend to spare the lips. Oral lesions consist of small bullae that often remain intact but heal rapidly if they rupture. Rarely, loss of nails can occur. Most cases occurs sporadically without precipitating factors but there are several triggering factors such as drugs (furosemide, spironolactone, penicillins, topical 5-Fluorouracil, benzyl benzoate), ultraviolet therapy, PUVA therapy, radiation therapy, localized trauma, skin grafts, amputation stump and incisional hernia scar. Bullous pemphigoid is associated with several associations such as paraneoplastic

pemphigus (differentiated by polymorphous mucocutaneous eruption, painful and persistent recalcitrant stomatitis, associated malignancy and histologically by features of subepidermal bulla and interface dermatitis), diabetes mellitus, multiple sclerosis, psoriasis, ulcerative colitis, nephropathy, internal malignancies especially of the gastrointestinal tract[3][4], renal cell carcinoma, gall bladder malignancy, colon or rectum, breast[5], parotid malignancy [6], B cell lymphoma [7] and lung carcinoma. Our case was associated with squamous cell carcinoma of the tongue. It has been reported that in squamous cell carcinoma, the expression of BPA1 and BPA2 is clearly increased [8] [9] which could stimulate the immune system to produce antibodies against the antigens that provoke manifestation of BP in patients with carcinoma. Treatment includes corticosteroids, antibiotics (tetracyclines) in combination with Nicotinamide, cyclophosphamide, azathioprine, methotrexate, mycophenolate mofetil, cyclosporine, rituximab, etanercept, plasmapheresis and intravenous immunoglobulins. So far, only one case report of BP has been associated with squamous cell carcinoma of the tongue. [10] This case is similar to the previous one reported.

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CONFLICT OF INTEREST:

The authors declare that they have no conflict of interest.

STATEMENT OF HUMAN AND ANIMAL RIGHTS

All procedures performed in human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This article does not contain any studies with animals performed by any of the authors.

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