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Case Report

Bullous Diabeticorum: A Rare Cutaneous Manifestation in Diabetic Patients

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Abstract

We hereby report an unusual case of Bulla involving the palmer aspects of fingers of a Diabetic patient with poor glycemic control. The Bulla were fluid filed and developed spontaneously without any history of trauma, friction or burn. Histopathology was typical of Bullous Diabeticorum without any inflammatory infiltrates. Bulla were aspirated and patient was given oral antibiotics for prevention of secondary infection along with anti Diabetic drugs to improve glycemic control.

Key words : Bullous Diabeticorum ,Bulla , Diabetes mellitus

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Introduction

A 60 years old obese lady presented in OPD with history redness of middle, ring and little finger of right hand which later developed into painless fluid filled vesicles. There was no associated history of trauma, friction, burn, exposure to chemicals or insect bite. She did not give any previous history of such lesions on any part of body. Patient was diagnosed as having type 2 diabetes mellitus 5 years ago and has been taking oral anti diabetic drugs with poor compliance and inadequate glycemic control. Her blood sugar levels were mostly above 300mg/dl. There was no history of numbness or burning sensation of feet.

On clinical examination, large fluid filled blisters were present on palmar aspects of index, ring and middle finger of her right hand. Bullae on middle and ring finger covered whole of the palmar surface of fingers distal to the distal phalangeal crease. Bulla on the little finger was the smallest of all, 0.8*0.8cm, on the most distal lateral part. All bullae were on non-erythematous base. (Figure 1) The radial and ulnar pulses of both hands were normal and sensations were intact. The differential diagnosis included bullous pemphigoid, podopompholyx and bullous diabeticorum. Skin biopsy was performed and sent for histopathology.

Histopathology of the lesions showed hyperkeratosis (as specimen was from palm), large intra-corneal blister without any inflammatory infiltrate. Epidermis showed hypergranulosis and hyperplasia. The dermis did not contain any inflammatory infiltrate. Direct immune-florescence studies were negative for IgG, IgA, IgM, C3, C4 and Fibrin deposition.

Based on history, clinical examination and histopathology finding a diagnosis of Bullous Diabeticorum was made.

The patient was treated with aspiration of her blisters with a small bore needles and the roof were left intact to avoid secondary infections. (Figure2) Patient was given prescription of oral anti-diabetic drugs and was thoroughly counseled about her diet and importance of good drug compliance.

Patient followed up after one week with good glycemic control and well healed lesions.

Patients with diabetes mellitus can present with various cutaneous manifestations. Few examples are acanthosis nigricans, necrobiosis lipoidica, diabetic dermopathy, fungal infections, herpes zoster and bullous diabeticorum.[1,2]

Bullous diabeticorum is a rare blistering condition that presents in diabetic patients with poor glycemic control and compliance. It is a non-inflammatory condition with unknown etiology that develops spon-

taneously in diabetic patients. It is more common in males then females and usual age of presentation ranges from 17 to 84. It is more common in acral areas and in lower extremities.[3]

The diagnosis of bullous diabeticorum is a disease of exclusion and it requires histopathology along with immunoflorence to distinguish it from other vesico-bullous diseases. The finding on histopathology are in conclusive and usually show subepidermal or intraepidermal bulla with varying proportion of spongiosis and no to scanty inflammatory infiltrates. Treatment of bullous diabeticorum is conservative and included wound cleaning. The lesions heal spontaneously in 2 to 4 weeks without scarring but can recur in same site or at a various site.[4]

This condition is often underdiagnosed or misdiagnosed for other bullous conditions. Therefore, diabetologist should be aware of this condition and should have a high index of suspicion. Proper management not only reduces morbidity and anxiety but also prevents chronic ulcer formation.[5]

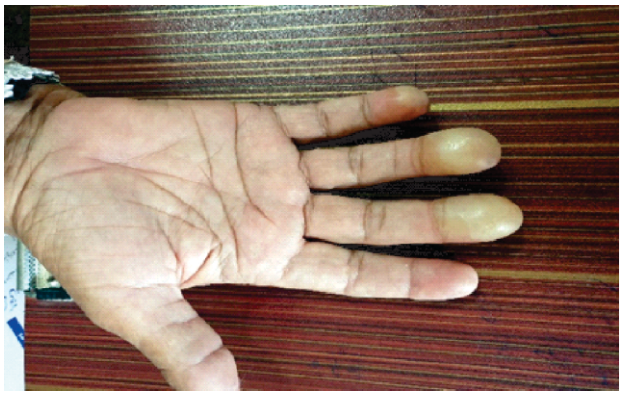

FIGURE 1: *Bulla present on palmer aspect of middle, ring and little finger*

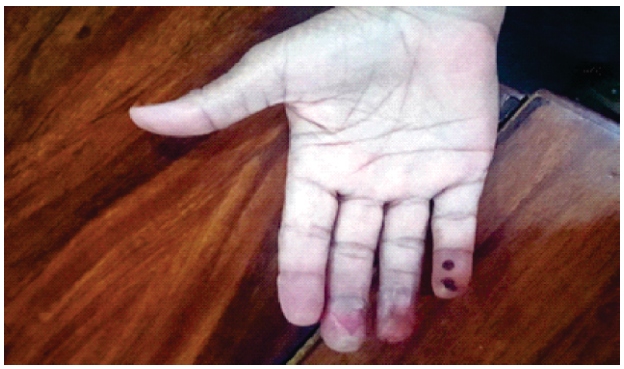

FIGURE 2: *Collapsed bulla after biopsy and aspiration*

Conflict of Interest
None
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References

1. Pupim AC, Campois TG, de Almeida Araújo EJ, Svidizinski TI, Felipe I. Infection and tissue repair of experimental cutaneous candidiasis in diabetic mice. J Med Microbiol. 2017;66(6):808-15.
2. Mendes AL, Miot HA, Haddad Junior V. Diabetes mellitus and the skin. An Bra Dermato. 2017;92(1):8-20.
3. Ghosh S, Bandyopadhyay D, Chatterjee G. Bullosis diabeticorum: a distinctive blistering eruption in diabetes mellitus. Int J Diab Develop Countries. 2009; 29(1):41.
4. Gupta V, Gulati N, Bahl J, Bajwa J, Dhawan N. Bullosis diabeticorum: rare presentation in a common disease. Case Rep Endocr. 2014; Article ID 862912.
5. Mota AN, Nery NS, Barcaui CB. Case for diagnosis. An Bra Dermatol. 2013;88(4):652-4.