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Case Report

Varicella bullosa in an adult

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Introduction

Varicella or chickenpox caused by varicella zoster virus is a very common viral infection occurring worldwide with a peak in late winters and early summers. Before the advent of varicella vaccine, about 90–95% of cases occurred before twenty years of age. It is the primary infection with a viraemic stage, after which the virus persists in nerve ganglion cells, usually sensory. Disease in adults is more serious and morbidity is higher compared to children.¹ Varicella bullosa

Fig. 1 – Flaccid bulla over right side of neck.

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Fig. 2 – Flaccid bulla over left arm.

in an adult is a rare clinical presentation which hardly finds any mention in literature. Herein, we report one such rare case.

Case report

A 21-year-old male patient presented with multiple fluid-filled lesions over the entire body of two days duration. He also gave history of developing two bullous lesions over the trunk which ruptured to leave behind raw areas.

Initially, two days back he first developed high-grade fever, without chills which was followed by appearance of these fluid-filled lesions in crops over the next twenty-four hours.

Examination revealed him to be afebrile. General and systemic examinations were essentially normal. Dermatological examination revealed multiple erythematous papules and few vesicles on an erythematous base distributed over face, neck, trunk, and all four extremities in a centripetal distribution. Two big bullae, the first one measuring 4 cm × 3 cm over right side of neck and the second measuring 3 cm × 2 cm over outer aspect of left arm, were present (Figs. 1 and 2). The bullae were flaccid and one-fourth of the bullous cavity was filled with thin pus. Tzanck smear of early blister showed many acantholytic cells as well as ballooning degeneration (Fig. 3). Gram stain showed presence of few neutrophils. Pus culture did not show any growth.

Based on the above features, a diagnosis of varicella bullosa was made. The patient was empirically treated with a course of oral antibiotics along with oral antivirals to which he showed excellent response.

Discussion

Varicella infection is characterized by pruritic, erythematous macules, papules and vesicles starting on the face and scalp and later progressing to involve the trunk and extremities. New lesions appear in crops. Vesicles on an erythematous base give rise to “dew drops on a rose petal” appearance. Lesions of different stages are seen at the same time. Sometimes in areas of pre-existing inflammation lesions can be dense and bullous.

Fig. 3 – Tzanck smear showing acantholytic cells and multinucleated giant cells (Giemsa 40×).

Lesions on the extremities are more severe on the medial aspect.²

Secondary bacterial infections of skin lesions can occur. Sometimes vesicles enlarge to form large flaccid bullae, become haemorrhagic and rupture, mimicking bullous impetigo. This is known as varicella bullosa which develops due to epidermolytic toxin production by *Staphylococcus aureus*. Varicella bullosa is very rare but not ominous. The prognosis of varicella bullosa is excellent and responds well with antistaphylococcal antibiotics.^{2,3}

Varicella bullosa needs to be differentiated from bullous impetigo caused by pathogenic strains of *Staphylococcus aureus* and is characterized by fragile fluid-filled vesicles and flaccid blisters with sites of predilection being perineum, periumbilical region, and neck creases.³ These bullous impetigo lesions rupture forming thin flat honey-coloured, “varnish like” crusts. Removal of crust leaves behind a bright red, inflamed, moist base that oozes serum.

Other atypical clinical presentations of chickenpox include varicella haemorrhagica, varicella gangrenosa, varicella neonatorum and congenital varicella.⁴ Varicella gangrenosa is generally seen in poor, malnourished children with morphological features including dark crusts forming in the vesicles which on separation leave behind ulcers. Varicella haemorrhagica is rare but is a serious and virulent form of varicella. Extensive generalized rash occurs with haemorrhages occurring into the vesicles along with petechiae and purpuric patches. Sometimes bleeding may occur from various mucous membranes.^{5,6} Disseminated varicella occurs in the neonate when the mother gets infected 1–4 days before delivery while

the risk for congenital varicella syndrome is most in the first 20 weeks of pregnancy.^{2,4} This syndrome is marked by limb hyperplasia, chorioretinitis, cortical atrophy, and cutaneous scars.

This case report aims to bring to the limelight the entity “varicella bullosa” which has been rarely reported in adults.

Conflicts of interest

The authors have none to declare.

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