CASE REPORT

ECZEMA HERPETICUM – IN AN ADULT

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ABSTRACT: Eczema herpeticum is a potentially life threatening viral infection with pre-existing skin disease. It occurs most commonly in patients with atopic dermatitis. An extensive rash with small vesicles filled with yellow pus and high fever is the commonest presentation of eczema herpeticum. Children are more commonly affected and primary episode is more severe than the recurrence. We are reporting a case of Kaposi's varicelliform eruption in 30 year old atopic female who presented with an abrupt onset of umbilicated vesicular eruptions with pustular crusting over the face. The mortality of Eczema Herpeticum is approximately 10% in which most fatalities occurring in infants and children with primary type of herpetic infection and in adults with inadequate cellular immunity.

KEY WORDS: KVE- Kaposi's varicelliform eruption, EH- Eczema herpeticum, HSV 1 & 2 – herpes simplex virus 1 & 2, AD- atopic dermatitis.

INTRODUCTION: KVE or EH is a distinct cutaneous eruption caused by HSV 1 & HSV 2, vaccinia virus & coxsackie A16 virus, superimposed on a pre existing dermatosis usually AD[1]. Occasionally seborrhoeic dermatitis or other dermatosis such as Darier's disease, benign familial pemphigus, pemphigus foliaceus, mycosis fungoides, Sezary's syndrome or ichthyosis vulgaris and in procedures such as derma abrasion, LASER therapy & second degree burn patients are susceptible for EH [2].

Clinically EH shows more or less extensive eruption composed of vesicles and pustules that may be umbilicated. These vesicles and pustules occur chiefly in the areas of pre-existing dermatosis but also in normal appearing skin. The face is usually severely affected and may become edematous. There may be fever and prostration. When it is recognised early, it can be easily & effectively treated with antiviral agents.

CASE REPORT: A 30 year old female presented with abrupt eruption reddish/pinkish fluid filled all over the face, of 3 days duration, which was associated with mild itching and burning. The lesions first appeared over the forehead and rapidly spreaded over upper orbital margins, bridge of the nose and malar region. There was no history of any drug intake or local application or any similar blistering episodes in the past. However the patient was a known case of AD.

Her examination revealed clusters of umbilicated fluid vesicles with clear/pustular crusting and scaling all over the face. [fig 1]. Generalized xerosis with few ill defined eczematous plaques with papules and scaling were present over the trunk and extremities. There was tender cervical lymphadenopathy. Her scalp, oral cavity, palms, soles and genitalia were normal.

Her investigations revealed- neutrophilic leukocytosis (TLC-14000 cells/mm³) raised IgE levels(1500 IU) and an elevated ESR of 45mm. Tzanck's smear was prepared which showed multinucleated giant cells and few acantholytic cells. Histopathological examination from an

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umbilicated vesicle showed necrotic epidermis in their centres, reticular and ballooning degeneration at their peripheries and multinucleated epithelial giant cells were present.

Thus keeping in view the clinical history and the characteristic Tzanck's smear & histopathology report, a final diagnosis of EH was made.

The patient was treated with oral acyclovir (800 mg for five times a day for 10 days) and responded well to the treatment.

DISCUSSION: KVE was described in 1887 by Moritz Kaposi [3]. The infections which are otherwise mild and localised, present in a florid and disseminated manner on the background of dermatoses like AD, seborrhoeic dermatitis, Darier's disease, benign familial pemphigus, pemphigus foliaceus, mycosis fungoides, Sezary's syndrome or ichthyosis vulgaris which have been caused due to some unknown reasons [4]. The true incidence of KVE is not accurately known because of its rarity and because of lack of large scale studies. KVE was originally considered as a disease of infants and it remains to be more common in children, but it can occur at any age [5]. An 18- year old male has been reported of KVE [5]. EH can occur as either a primary or a recurrent type of infection. A majority of patients with primary type of EH are infants or children. The primary type of EH can be a serious disease with viremia, except in immune-compromised patients.

The exact pathogenesis of KVE is unclear. It has been speculated that an impaired barrier function of the epidermis and a defective host immune response are the factors that are responsible for an increased susceptibility to KVE. In a retrospective review of 100 KVE patients, Wollenberg et al. found that increased serum IgE levels and an early onset of AD were both risk factors [6]. Defective T-cell immunity could also lead to KVE. In our case also the IgE level was increased.

A recent study by Howell et al. concluded that cathelicidin peptide; LL-37 might be deficient in patients with AD, which could explain the increased susceptibility to KVE.[7].

The disease begins as clusters of umbilicated vesiculopustules which are accompanied by a flu-like syndrome. These pustules progress to painful, haemorrhagic, crusted, punched out erosions that coalesce to form denuded areas which are prone to secondary bacterial infection. Though HSV spreads by droplet infection or by direct contact, there has been no mention of strict isolation of KVE cases in literature. There have been reports of KVE presenting as mini outbreaks in dermatology wards, resulting in life threatening nosocomial infections [7]. There is positive family history of AD, which is also present in our patient.

The diagnosis of KVE is mainly made on the basis of clinical examination, although several laboratory tests can be helpful. Tzanck smear of opened vesicles can provide a rapid diagnosis when it shows characteristic multinucleated giant cells and acantholysis which was also seen in our patient. Viral culture of fresh vesicular fluid and direct observation of the infected cells scraped from the ulcerative lesion by DFA are most useful and reliable diagnostic tests available. If the lesions are atypical, old or equivocal, a biopsy or PCR should be considered.

Although KVE is self limiting disorder but systemic viraemia may involve multiple organs which may lead to a major cause of morbidity and mortality. So early diagnosis and treatment is warranted. Tzanck's smear is the quickest test enabling to start the treatment early and prevent the morbidity and mortality. An early use of anti-viral drugs and antibiotics is extremely important; their use should not be delayed on pending other laboratory tests. For severe cases of EH systemic acyclovir (intravenous) is the drug of choice.

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Fig. 1: Multiple crusted umbilicated vesicles present over the

Fig. 2: Tzanck smear showing multinucleated giant cells

Fig -3: same patient 10 days after Treatment with oral acyclovir.

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