CASE REPORT

Acute generalized exanthematous pustulosis due to parentral diclofenac in a trauma patient

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ABSTRACT

Acute generalized exanthematous pustulosis (AGEP) is a severe adverse drug reaction which is usually characterized by acute onset of multiple sterile, small non-follicular pustules over an erythematous base. It is usually self limiting with systemic involvement in about 20% of cases. Most commonly it is caused by drugs like penicillin, sulphonamides, quinolones, hydroxychloroquine, terbinafine and diltiazem. We present here a case of AGEP due to diclofenac, which is a commonly used non-steroidal anti inflammatory drug.

KEY WORDS: AGEP, Drug reaction, Diclofenac

CASE REPORT

A 50-year-old male admitted with alleged history of road side accident 5 days ago, presented with development of diffuse redness and swelling over body, which was associated with intense burning sensation for 2 days. Patient gave a history of intravenous diclofenac injection administered three days prior to development of rash. On cutaneous examination there was presence of diffuse erythema and oedema over neck, trunk and extremities predominantly involving the flexures with overlying multiple, tiny, non-follicular pustules and a few vesicobullous lesions (Fig. 1a, 1b). He had no significant medical history and his systemic examination was unremarkable. Keeping differential diagnosis of drug reaction with eosinophilia and systemic symptoms (DRESS), acute generalized exanthematous pustulosis

Fig. 1a Diffuse erythema over trunk and arms with multiple non-follicular pustules

Fig. 1b Diffuse erythema with multiple tiny non-follicular pustules and vesico-bullous lesions over thigh

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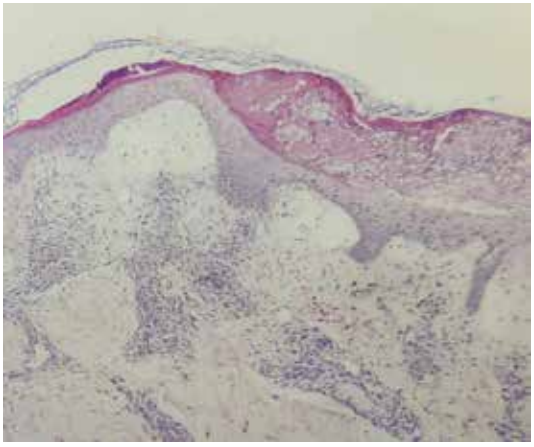

Fig. 2a Subcorneal bulla with neutrophils

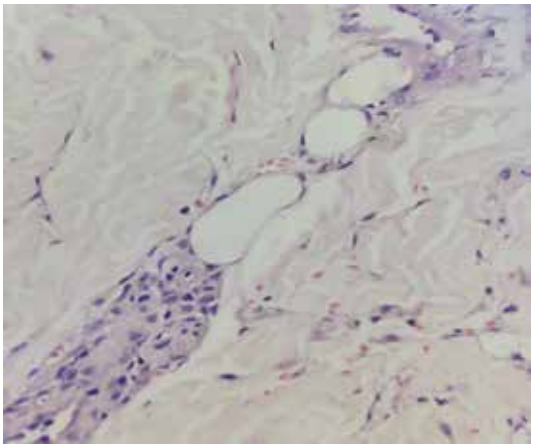

Fig. 2b Dermal edema and perivascular lymphocytic infiltrate

(AGEP) and generalized pustular psoriasis, a skin biopsy for histopathological examination was done. Skin biopsy revealed subcorneal bulla with neutrophils, dermal edema and perivascular lymphocytic infiltrate (Fig. 2a, 2b). Laboratory investigations revealed leukocytosis with neutrophilia, raised CRP & ESR. Renal function tests were deranged along with hypocalcemia. Finally, on clinico-pathological correlation a final diagnosis of Acute generalized exanthematous pustulosis was made.

DISCUSSION

Acute generalized exanthematous pustulosis is a severe cutaneous adverse reaction, caused by drugs in the majority of the cases, but sometimes, associated with acute viral infections. It is a type IV hypersensitivity reaction mediated by CD8+/CD4+ T cells. AGEP is characterized by the rapid development of non-follicular, sterile pustules on an erythematous base.[1] In severe cases there can be mucosal and systemic involvement.[1] Mucosal involvement, especially oral, is reported in about 20%–25% of cases.[2] Systemic involvement can occur in acute phase of reaction, characterized by presence of eosinophilia, neutrophilia, elevated CRP, hypocalcemia.[3] Histologically, characterized by spongiform subcorneal and intraepidermal pustules, marked papillary oedema, and perivascular infiltrate with neutrophils and exocytosis of eosinophils.[4] AGEP needs to be differentiated from generalized pustular psoriasis, in which, there is a past history of psoriasis; there might be presence of other psoriatic skin lesions, the onset is usually slow, and the patient may get recurrent pustular eruptions. In conclusion, AGEP is a rare condition that may be easily misdiagnosed. Usually, it is self-limiting disorder, in which withdrawal of the causative medication is the only treatment required in most of the cases. We present here a case of AGEP in a road side accident case following parentral diclofenac, which is one of the commonest NSAIDS being used.

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