# ACUTE INFANTILE HAEMORRHAGIC EDEMA

Tarek Mohamed Arshah.

Department of Dermatology, Teaching Hospital of Zliten, Faculty of Medicine, University of AlMergeb, Libya.

## INTRODUCTION

AIHE is a rare disorder, it´s manifestations are almost exclusively cutaneous. There is often a history of recent upper respiratory and /or treatment with Antibiotics. Clinical features include ecchymoses of the head and extremities. Aetiology of AIHE include infections, drugs and vaccination. Infections are usually respiratory or urinary, e.g Streptococcal , Staphylococal, Esherichia coli, Cytomegalovirus, Adenovirus, Coxsakievirus, or rota virus infections[1].

AIHE may be triggered by infectious agents, although no definitive associations have been made[2].

AIHE represents a hypersensitivity or leukocytoclastic vasculitis, characterized by inflammation of the small dermal vessels with fibrinoid necrosis and extravasation of red blood cells. Although the presentation of AIHE is terrifying for parents, It is self-limiting disease[3].

### Case study

We present 9 months old Libyan male infant with acute infantile hemorrhagic edema (AIHE), which is rare transient benign self-limiting skin disorder, who was admitted to Paediatric Department, Zliten Teaching Hospital because of fever and vomiting for 5 days duration and appearance of hemorrhagic skin rash for 4 days before admission. On admission to the hospital, he had upper respiratory tract infection, fever 38.5°C and dehydrated with sunken eyes. His skin rash has appeared on cheeks, ears and upper extremities as non- itchy different sized from 0.4 cm to 3.5 cm in diameter edematous purpuric red annular and medallion-like plaques. Laboratory investigations showed Leukocytosis, thrombocytosis with high ESR and elevated C-reactive protein. During admission child was given I.V fluids and paracetamol syrup, general condition has rapidly improved with resolving of fever and stopping of vomiting. On the other hand the appearance of new skin lesions have continued on lower extremities after one week of onset of skin rash on the face. Within 5 day, the child was discharged in good general condition on short course of systemic Steroids and prophylactic oral Antibiotics.

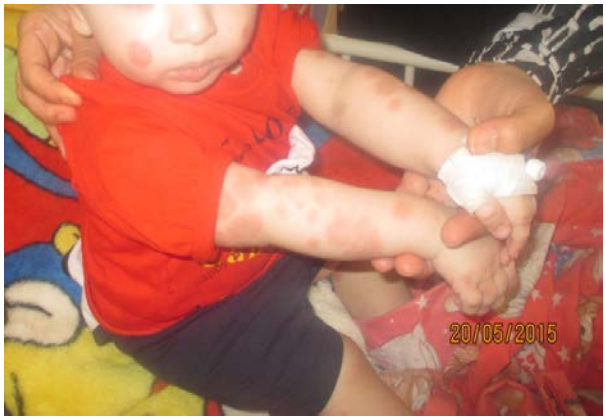
## DISCUSSION

AIHE is classified as leukocytoclastic vasculitis of small vessels of skin similar to Henoch-schoenlein purpura (HSP). Our patient had upper airway infection as trigger factor at admission.

Many of the authors consider the disease as an immunological reaction after an antigenic trigger. Infections, drug intake and immunization are the main etiologic factors as in 75% of the cases[4,5,6].

There are no diagnostic criteria for the disease[4,7,8]. So our diagnosis was clinical. The child was non-toxic in good general condition, this was found also in study of 7 cases in Turkey[9].

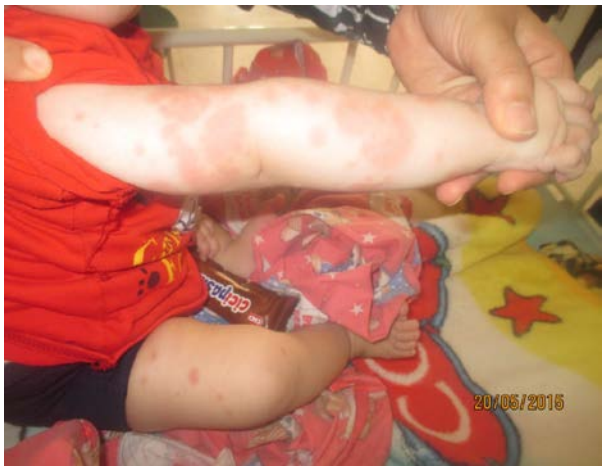
Our patient had multiple different sized red ecchymotic plaques on face and all surfaces of extremities which have appeared, one day after history of fever, on face and upper extremities (figure 1).




**(Figure 1)** Ecchymotic plaques on face and upper extremities

In the second and third days of appearance of skin lesions more new lesions on arms and lower extremities have appeared (figure 2).

Laboratory findings were similar to laboratory finding of seven cases of Hayrullah Alp, et al[9].




**(Figure 2)** Ecchymotic plaques on lower extremities

*Correspondence and reprint request :*
*Tarek Mohamed Arshah*
*Dermatology Department, Zliten Teaching Hospital.*
*Medical College, AlMergeb University, Libya*
*Email:* ----------

In our patient urine analysis was normal, the most important differential diagnosis was meningococcemia and septicaemia which was excluded by finding of no involvement of internal organs. No specific treatment is available for AIHE[9].

The prognosis is generally good with complete spontaneous resolution occur within 2-3 weeks[3].

As treatment for AIHE our patient was given Xilone (prednisolone) 5mg/5ml, 2.5ml twice daily for 5 days.

In clinical perspective of Hayrullah Alp, et al Antihistamine (Hydroxyzine HCL or diphenhydramine were given to 4 patients, whose their lesions disappeared earlier in the antihistamine group (mean 4 days) than in other group who has not taken Antihistamine[9].

As topical treatment for our patient Hydrocortisone 1% cream was prescribed.

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