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Clinical Image

CLINICAL IMAGE

# Purpuric rash in an infant after chicken pox exposure

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A 7 month-old boy presented with a 1-day history of periauricular and lower limb swelling plus rash.

He had been refusing to weight bear and had a temperature.

Numerous macules were noted over the limbs, face, but his trunk was spared. The lesions were 1–2 cm well-circumscribed purpura, which varied from red to brown (Fig. 1). His lower limbs showed signs of oedema. He was systemically well.

As this child had been exposed to chickenpox, a differential diagnosis of haemorrhagic varicella and septicaemia were considered. Blood results showed a mildly raised WCC and a C-reactive protein (CRP) of 68. He was diagnosed with acute haemorrhagic oedema of infancy (AHOI) and treated symptomatically. In the following week, he developed a vesicular rash and was diagnosed with chicken pox (Fig. 2).

AHOI is a rare small vessel vasculitis characterized by large purpuric lesions, fever and oedema. It can occur in children between 4 months and 2 years with a recent upper respiratory tract infection [1]. It may be triggered by viral infections, medication and immunizations. This case demonstrated AHOI secondary to varicella zoster.

The AHOI rash has non-tender, annular and purpuric lesions, with associated non-pitting oedema, which has been reported to be tender [1, 2]. It typically spares the trunk, affecting the face, ears and limbs. Individual lesions can increase in size and coalesce as the disease progresses. It has been noted by Fiore *et al* that WCC and CRP can be slightly elevated as with our patient [1].

AHOI can be misdiagnosed as haemorrhagic varicella or septicaemia but there is no indication for antibiotic cover if there is no other source of sepsis suspected. [1] The management is symptomatic, with resolution taking an average of 2 weeks [3].

Learning points

- AHOI is a benign vasculitis characterized by a triad of fever, oedema and purpuric rash.
- Common triggers include preceding viral infection, medication (penicillin and cephalosporin's) and immunisations. This case demonstrated AHOI likely secondary to varicella zoster as have other reported cases [4, 5].
- Only symptomatic treatment is indicated.

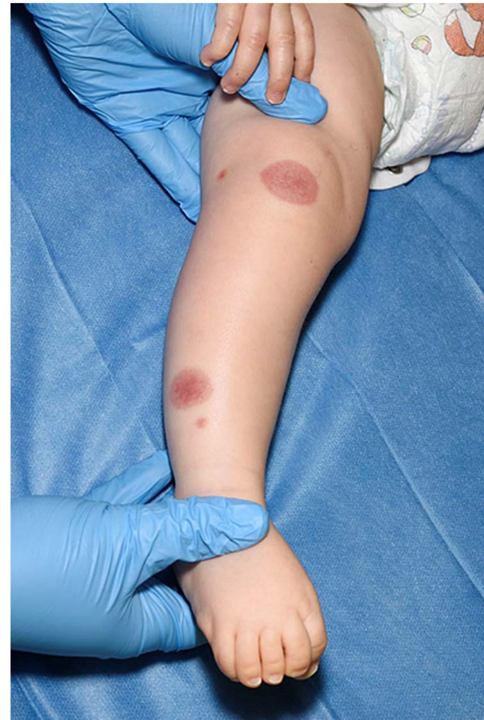

**Figure 1:** Well-circumscribed oval and round purpuric lesions over the upper and lower limbs.

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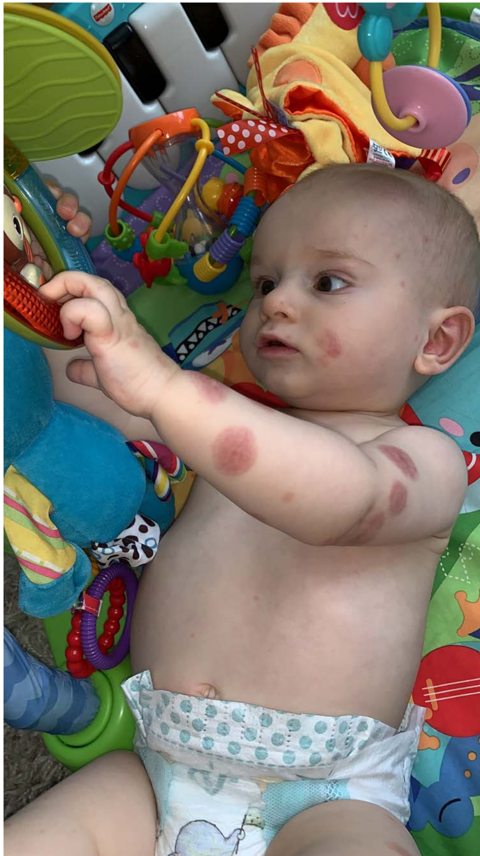

**Figure 2:** Small papules and vesicles over the scalp, face, trunk and limbs characteristic of varicella.

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We would like to thank the family for agreeing to publish these images of their child to support medical education.

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## ETHICAL APPROVAL

No ethical approval required.

## CONSENT

Written consent was taken from the family to publish this case report.

## GUARANTOR

Dr Martin Edwards is the guarantor for this case report.

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