Unilateral erythaema nodosum: atypical presentation in paediatrics

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Accepted 10 November 2017

DESCRIPTION

A previously healthy 12-year-old boy was observed in the emergency department due to pain and erythaema in the left shin for the past 2 weeks. He was discharged with flucloxacilin for cellulitis. One week later, he returned with oedema and erythaema of the left shin, with palpable nodules and purple discolouration (figure 1). The right leg was normal. Oropharyngeal hyperaemia was observed.

Complementary study revealed erythrocyte sedimentation rate of 12 mm/hour and antistreptolysin O titre was 985 UI/mL (normal range 0–408 UI/mL). C reactive protein was <2.90 mg/dL; autoimmunity study, infectious serologies (hepatitis B virus and Epstein-Barr virus, EBV, *Mycoplasma pneumoniae* and *Salmonella* spp.) rapid strep test and Mantoux test were negative. Ultrasound showed subcutaneous oedema. Biopsy revealed septal panniculitis, compatible with erythaema nodosum (figure 2). He was discharged.

Four weeks later, there was resolution of nodules and oedema of left shin, which showed only minor discolouration, without atrophy or scarring (figure 3).

Erythaema nodosum is the most common presentation of panniculitis.[1 2] This disease is rare among children, and its peak incidence occurs in the third decade.[1–3] We found no descriptions of unilateral erythaema nodosum in children. Different stimuli cause inflammation of subcutaneous fat.[1–3] Usually, no underlying cause is identifiable, but systemic inflammatory diseases, infectious diseases, neoplasm and drug reactions should be excluded.[1] The most common provoking insult in children is β-haemolytic *Streptococcus*.[3] Diagnosis is clinical: bilateral erythematous nodules, frequently in the shins, that evolve in the course of 4–8 weeks with complete resolution.[1] When the diagnostic criteria are not fulfilled, biopsy must be performed to clarify doubtful cases.[1 3]

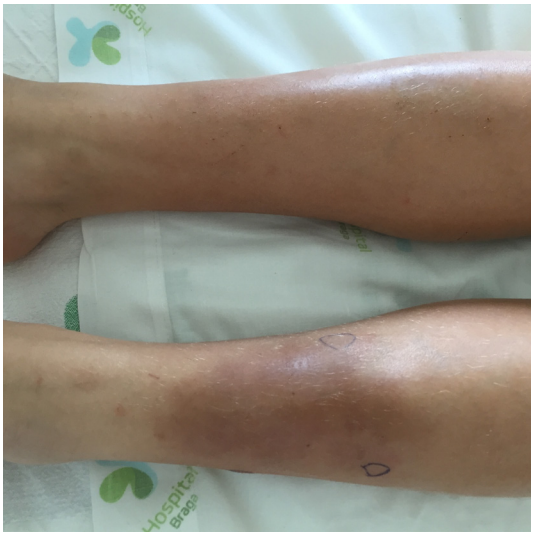

Figure 1 Erythaema, oedema and nodules in the left shin.

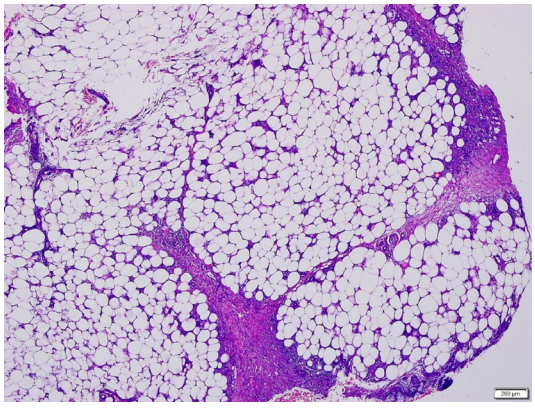

Figure 2 Incisional biopsy. H&E ×40. Septal panniculitis.

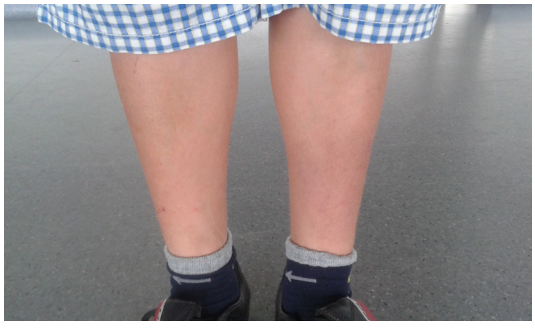

Figure 3 Re-evaluation 4 weeks after discharge.

Learning points

- Erythaema nodosum is diagnosed based on clinical criteria: bilateral erythematous nodules, most frequently in the pretibial region.
- When diagnostic criteria are not fulfilled (eg, unilateral lesions), incisional biopsy must be performed for diagnosis.
- Unilateral erythaema nodosum is rare, but one must be aware of this entity.

To cite: Calheiros-Trigo F, Martins S. *BMJ Case Rep* Published Online First: [*please include* Day Month Year]. doi:10.1136/bcr-2017-222441

Contributors Report written by FCT and overseen by SM.

Competing interests None declared.

Patient consent Guardian consent obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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