

### Spot diagnosis

An 11 year old girl presented to her GP with painful skin lesions on her arms and legs. She had had a 3 week history of an upper respiratory illness & her GP had started her on amoxicillin for a presumed lower respiratory tract infection, however 3 days after starting treatment, she re- attended with this rash on her arms and legs (see images); her parents are concerned that this is a drug allergy. Apart from a low grade fever (38c), she is well and her observations and examination are otherwise all unremarkable. What is the diagnosis?





Close up of lesions on the legs

Answer- The diagnosis was erythema nodosum (EN) secondary to a presumed recent streptococcal infection.

Summary- Extensive testing was all negative (negative throat swab, U&Es, LFTS, serum ACE) apart from raised CRP (62)/ ESR (56) which settled. Her ASO titre remained normal. She had transient trace haematuria (she was pre-menarchal), developed painful joints (ankle, knee, elbow), and fluctuating erythema of the sclera. She made a full recovery after being treated with a course of Clarithromycin, and resolved within 2 weeks.

Post streptococcal EN was considered by microbiologists as the most likely diagnosis clinically but was not microbiologically proven. This was because of the other post streptococcal symptoms (probable arthralgia and scleritis) which would not be seen with a drug allergy.

Erythema nodosum (EN) is a painful disorder of subcutaneous fat (panniculitis), usually presenting on the lower legs, & occasionally on the arms (7% of cases).<sup>1</sup> EN is a manifestation of systemic disease, commonly streptococcal infection (Grp A beta haemolytic strep), with a peak incidence in the winter months, in young people, and is more common in women. Post streptococcal glomerulonephritis also needs to be considered. Importantly EN can be associated with non streptococcal conditions including TB, sarcoid, inflammatory bowel disease, drug reactions (including for this case amoxicillin) or lymphoma and other malignancies.<sup>2</sup>

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#### References

1. Geraint James D. ERYTHEMA NODOSUM Br Med J. 1961 Mar 25; 1(5229): 853–857.
2. Requena L, Sánchez Yus E. Erythema Nodosum. Semin Cutan Med Surg 2007 26:114-125

### Competing interests

We have read and understood the BMJ Group policy on declaration of interests and declare the following interests: none

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