Unusual cause of lymphangitis in a 2-year-old boy

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DESCRIPTION

A 2-year-old previously healthy boy presented with 24 h of fever, and painful right axillary and elbow swelling. He had a 2×2×2.5 cm non-tender, non-erythematous, mobile axillary mass, oedema and mild erythema of his lower right arm, and cervical and inguinal lymphadenopathy. Initial investigations showed: haemoglobin 106 g/L, white cell count $13.2 \times 10^9/\text{L}$ and C reactive protein 50 mg/L. Ultrasound confirmed lymphadenopathy and soft tissue oedema, and the patient was treated with oral co-amoxiclav for lymphadenitis. After 4 days, his treatment was changed to intravenous ceftriaxone due to persisting symptoms. His fever

terminated on day five, and the axillary lymph node decreased slightly in size. The arm swelling remained, so oral clindamycin was added, with little further improvement. A number of investigations were planned to investigate the persisting swelling, including lymph node biopsy, but an MRI scan (figure 1) was diagnostic—it showed cellulitis, and epitrochlear and axillary lymphadenopathy, suggestive of cat scratch disease, due to the marked inflammation around the lymph node.¹ Additional history revealed the family had two cats, including one kitten. The child was treated with azithromycin for 5 days. His *Bartonella henslae* IgG titre was 256, confirming the diagnosis. He made a full recovery.

Figure 1 MRI scan of right upper arm. Coronal short tau inversion recovery demonstrating (A) a high T2 signal ovoid subcutaneous mass in the epitrochlear region (arrow), with a further mass lying more proximally (arrowhead) and (B) a sausage shaped high T2 signal mass in the right axilla (arrow). Axial T2 fat-saturated image (C) showing an ovoid subcutaneous inflammatory mass (arrowheads) with a central hilum (arrow), suggestive of a lymph node.

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Although named ‘cat scratch disease’, the organism can be transmitted from cats (kittens pose the highest risk) or dogs by a scratch, bite or lick, although a specific history of these is often absent.²

Learning points

- ▶ This case demonstrates the importance of obtaining full details of all potential infectious exposures including pets, and conducting a thorough examination, including of the epitrochlear lymph nodes.
- ▶ It is important to consider and specify *Bartonella* infection as a potential diagnosis on radiological request, so signs of this can be specifically assessed by the radiologist.
- ▶ The UK national reference laboratory ceased performing *Bartonella* serology in July 2015 (although PCR testing remains available from tissue samples), increasing the importance of clinical suspicion and radiological diagnosis.

Azithromycin is the only antibiotic proven to reduce duration of disease, although resolution usually occurs without treatment.³

Contributors RM was involved in clinical care of the patient, interpreted the data and drafted the initial manuscript. JT conceptualised the report, and analysed and interpreted the data. JC conceptualised the report and was involved in clinical care of the patient. MS conceptualised the report, was involved in clinical care of the patient and interpreted the data. All the authors reviewed and approved the final manuscript as submitted.

Competing interests None declared.

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