E-QUID: QUESTION /Musculoskeletal imaging

Chronic joint pain in a child

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Observation

A 11-year-old girl was referred to our department for an MR imaging examination to investigate chronic inflammatory pain of the lower limbs. These symptoms started 6 months earlier with pain and swelling of the right and then the left ankle. She had no fever, and the laboratory results showed only a slight increase in the sedimentation rate. At that time, radiography, CT, and MRI were performed. These examinations suggested cystic lesions with contrast uptake at sites of inflammation. A biopsy of the left tibia supported the diagnosis of a solitary bone cyst. The patient continued to complain of pain. Clinical examination showed oedema of both ankles, predominantly the left. Radiograph (Fig. 1) and MR imaging examination of the legs (Fig. 2) were performed.
Figure 1. X-rays images of the left leg in lateral (a) and frontal (b) projections.

Figure 2. MRI of legs. a) Coronal STIR-weighted image; b) T1-weighted image; c) Coronal and d) Axial contrast-enhanced T1-weighted images with fat-suppressed.

What is your diagnosis?

Based on the clinical and imaging findings, which of the following diagnoses is the most plausible?
• chronic recurrent multifocal osteomyelitis
• blood disease
• eosinophilic granuloma

Disclosure of interest

The authors declare that they have no conflicts of interest concerning this article.