## TEST YOURSELF: QUESTION

## Epiphyseal lesion of the humerus in a child

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## History

A 13-year-old boy presented with a one-and-a-half-month history of right shoulder pain that was precipitated by a competitive wrestling episode during which he felt a "cracking" sensation. The patient did not seek immediate medical attention and was treated at home with a sling, ice, and ibuprofen. After incomplete pain relief radiographs were

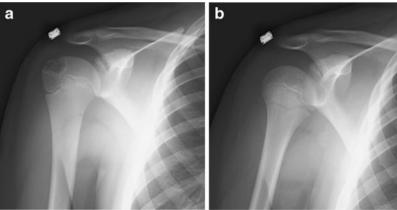
Fig. 1 AP-external rotation (a)

obtained (Fig. 1). Past medical history was unremarkable. Physical examination revealed a right upper extremity that had no muscular asymmetry, normal neurological and vascular function, and normal motor function with a full range of shoulder motion in all planes and axes.

A magnetic resonance imaging (MRI) scan followed by open biopsy were performed (Figs. 2 and 3).

What is the diagnosis?

and AP-internal rotation (b) radiographs of the right proximal humerus



The diagnosis can be found at doi: 10.1007/s00256-012-1567-2

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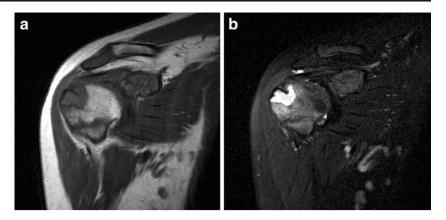
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Fig. 2 a T1-weighted coronal image (repetition time/echo time, 734/21). b T2-weighted coronal image with fat suppression (repetition time/echo time, 5,320/78)



**Fig. 3** Low-power (×4, H&E) histological image (a); low-power (×20, H&E) histological image (b)

