

### MUSCULOSKELETAL CASE 9. DIAGNOSIS

#### ELASTOFIBROMA DORSI

The findings are characteristic of a lesion known as elastofibroma dorsi, and a biopsy specimen is not required for confirmation.<sup>1</sup> This is a relatively uncommon benign fibroproliferative tumour of uncertain pathogenesis.<sup>2-4</sup> Typically, these tumours

arise beneath the rhomboid major and latissimus dorsi muscles, not far from the inferior angle of the scapula. Very rarely they can be found at other sites in relation to the deltoid muscle, within the axilla or intraspinal space and occasionally even within the foot or adjacent to abdominal viscera.<sup>3</sup>

The tumour is typically unilateral,

although bilateral involvement has been reported. Tumours are usually very slow growing, and in most instances are asymptomatic. Commonly, the tumour consists of variable quantities of fat and fibrous tissue with a considerable amount of elastin. They may arise as a reaction to constant friction of the scapula against the chest wall. Before the advent of cross-sectional imaging, a biopsy was required for definitive diagnosis. The characteristic history and location, as well as the MRI appearance in this case made the performance of a biopsy unnecessary. Also, patients can generally be evaluated adequately by computed tomography (Fig. 5), which shows the classic elliptical lesion with stranding deep to the musculature.<sup>1,3</sup>

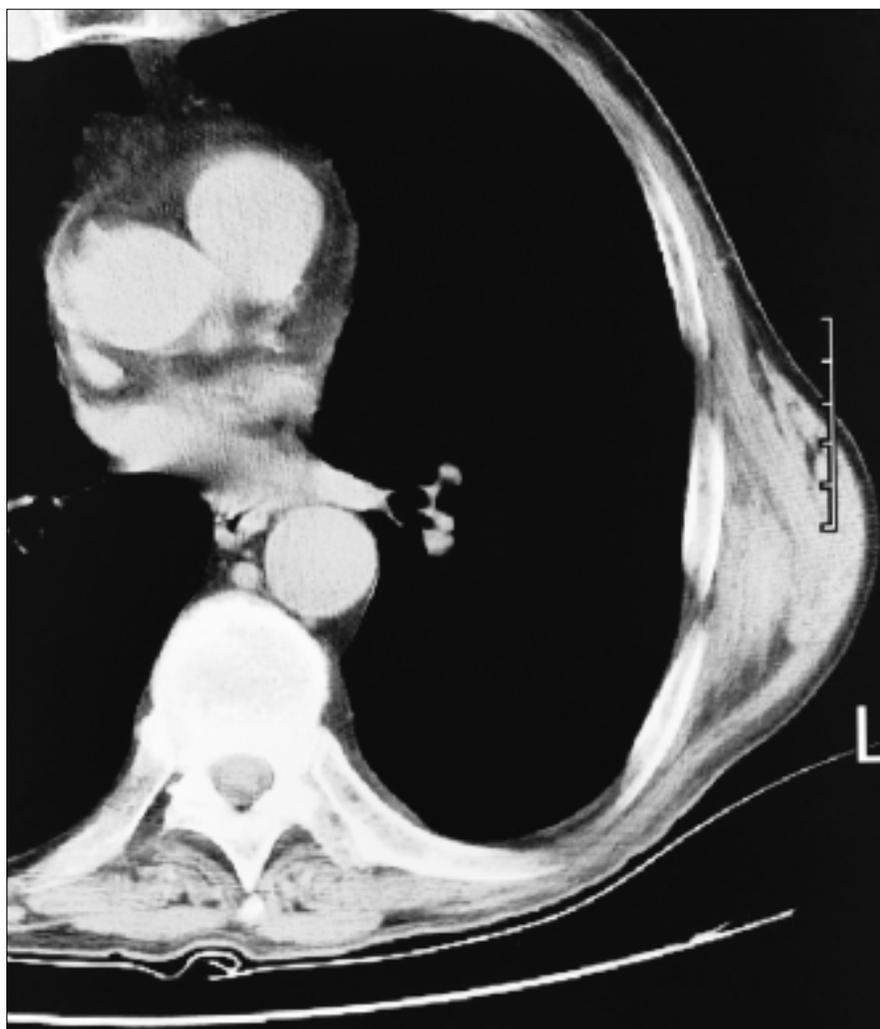


FIG. 5

#### References

1. Kransdorf MJ, Meis JM, Montgomery E. Elastofibroma: MR and CT appearance with radiologic-pathologic correlation. *AJR* 1992;159:575-9.
2. Naylor MF, Nascimento AG, Sherrick AD, McLeod RA. Elastofibroma dorsi: radiologic findings in 12 patients. *AJR* 1996;167:683-7.
3. Brandser EA, Goree JC, El-Khoury GY. Elastofibroma dorsi: prevalence in an elderly patient population as revealed by CT. *AJR* 1998;171:977-80.
4. Yu JS, Weis LD, Vaughan LM, Resnick D. MRI of elastofibroma dorsi. *J Comput Assist Tomogr* 1995;19:601-3.

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