

MUSCULOSKELETAL CASE 9. PRESENTATION

A 69-year-old woman presented to her general practitioner's office with complaints of a vague fullness in her upper back, which she had noticed over several years and which she thought was gradually becoming more prominent.

On physical examination, only vague, deep fullness was found on the right side. Radiographs were unremarkable. Magnetic resonance imaging (MRI) was done. Axial images were obtained. Fig. 1 (repetition time [TR] 500 ms, echo time [TE] 16 ms) demonstrates a well-circumscribed lesion deep to the chest-wall musculature but superficial to the ribs (arrows) of mixed signal intensity, with streaks of higher signal intensity running through it. This elliptical lesion shows very minimal brightening on T_2 -weighted imaging (Fig. 2, TR 4083 ms, TE effective 96 ms). A fat-suppressed gadolinium-enhanced image, using T_1 -weighted imaging (Fig. 3, TR 550 ms, TE 16, ms), demonstrates modest enhancement in a patchy fashion. Little free water is seen in the lesion on the fat-suppressed image (Fig. 4, TR 5083 ms, TE effective 30 ms, inversion time [TI] 120 ms). The lesion is virtually impossible to discern on this sequence.

What would be your next step?
What would be your diagnosis?

For the answer see page 142.

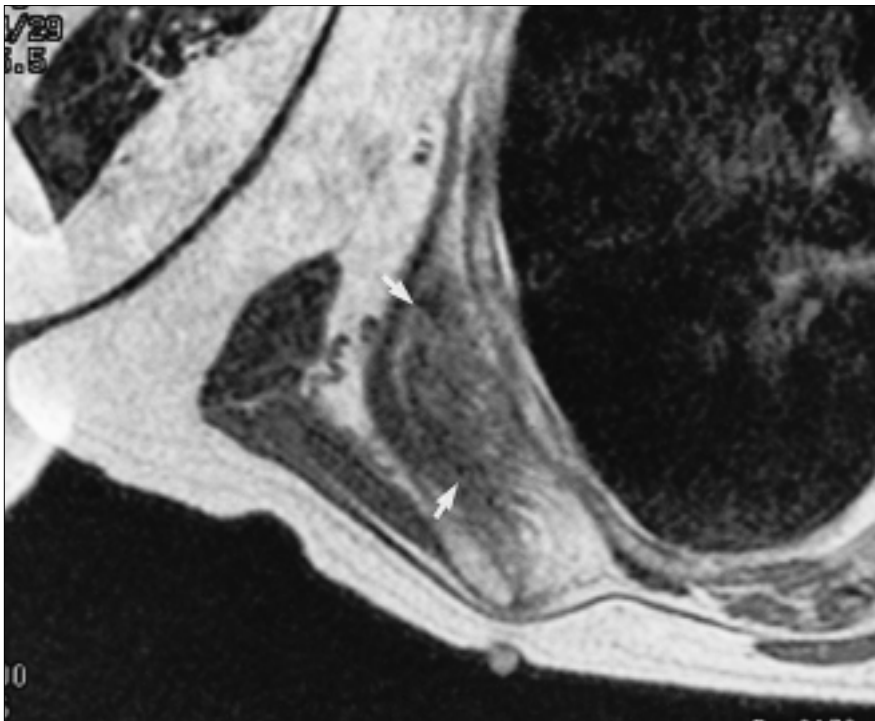


FIG. 1

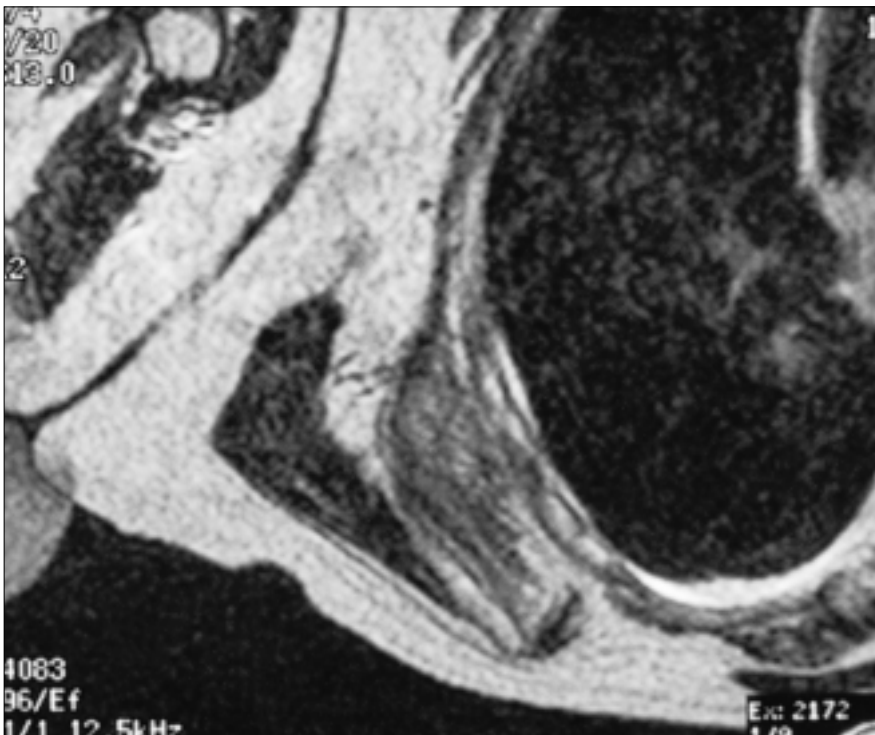


FIG. 2

Section Editor: Peter L. Munk, MD

Submitted by Peter L. Munk, MD, and Mark J. Lee, BSc, Department of Radiology, Vancouver General Hospital and Health Sciences Centre, Vancouver, BC

Inquiries about this section should be directed to Dr. Peter L. Munk, Professor, Department of Radiology, Vancouver General Hospital and Health Sciences Centre, 855 West 11th Ave., Vancouver BC V5Z 1M9.

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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.¹ This is a relatively uncommon benign fibroproliferative tumour of uncertain pathogenesis.²⁻⁴ 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.³

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.^{1,3}

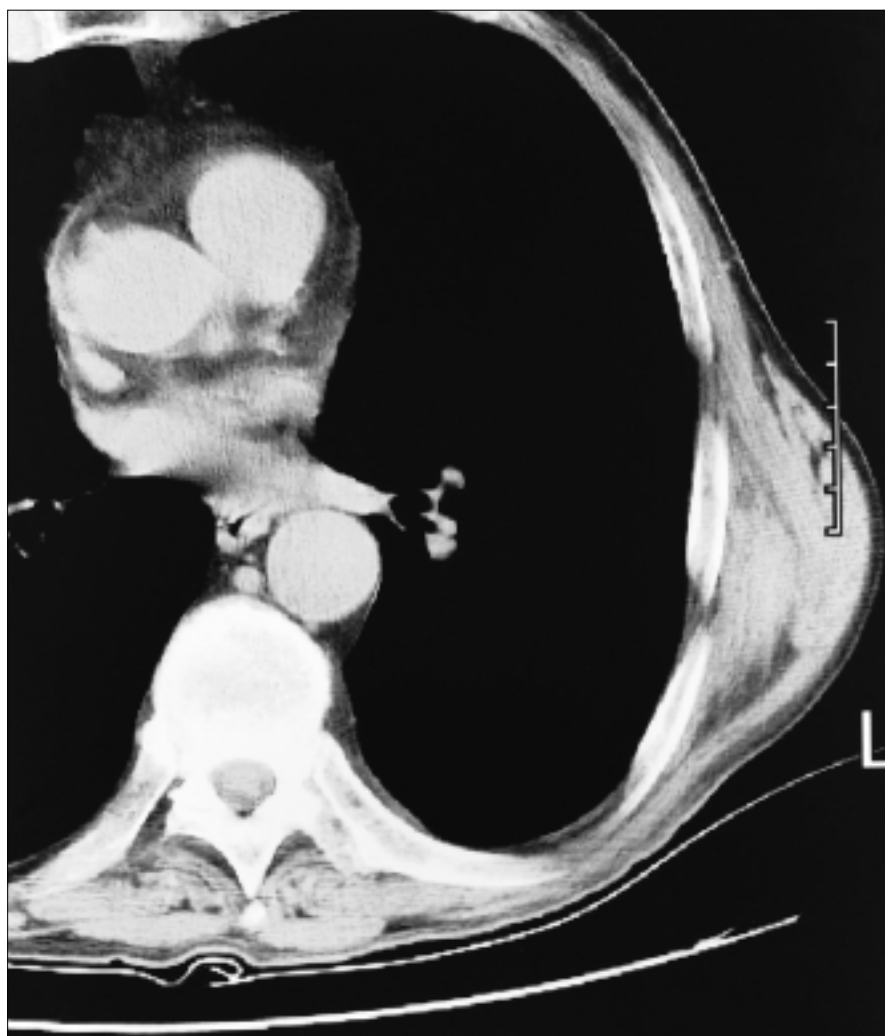


FIG. 5

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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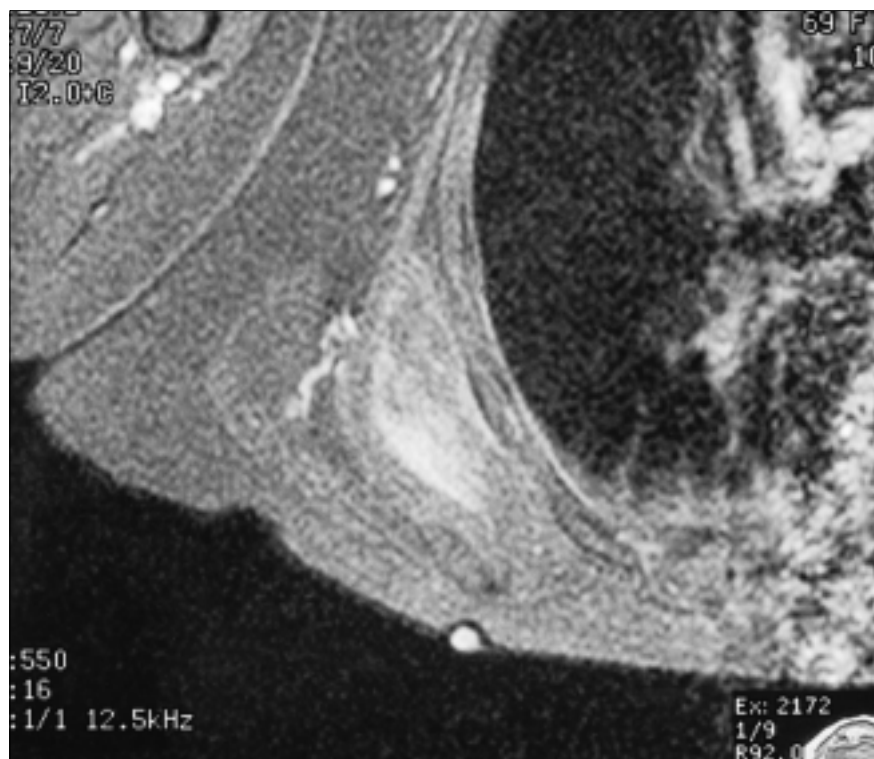


FIG. 3

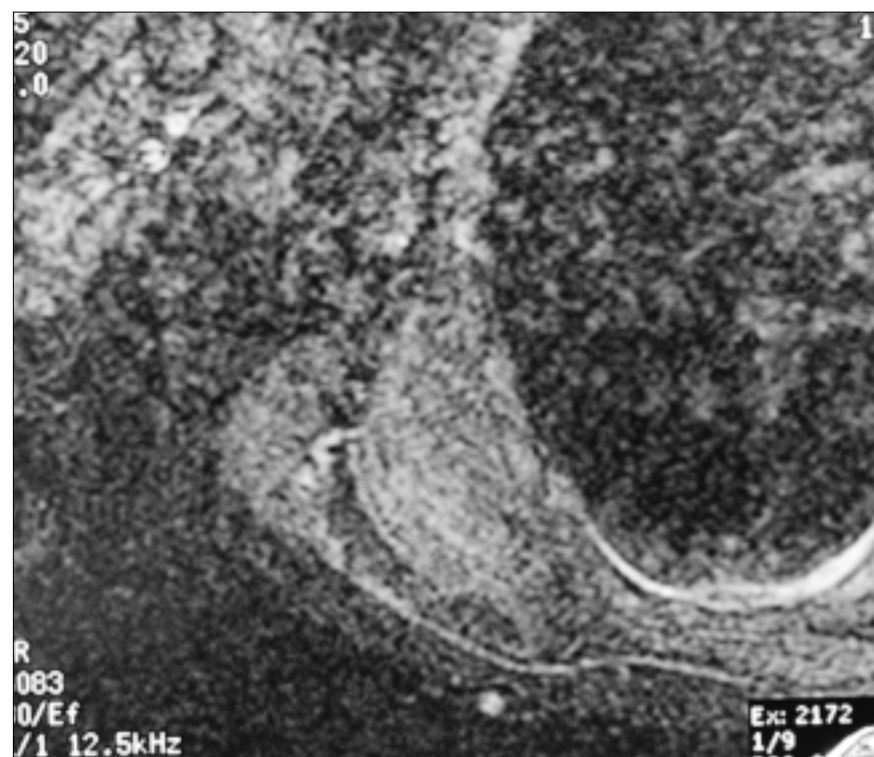


FIG. 4

Notices

Avis

Trauma and Critical Care Surgery

The 64th annual course "Advances in Trauma and Critical Care Surgery," sponsored by the University of Minnesota Medical School, will be held June 7 to 9, 2000, in the Ted Mann Concert Hall of the University of Minnesota, Minneapolis. Credit: 22 hours in AMA Category 1. Fees are US\$595 (US\$395 for residents). Contact: Office of Continuing Medical Education, University of Minnesota, 107 Radisson Hotel Metrodome, 615 Washington Ave. SE, Minneapolis MN 55414; tel 612 626-7600, fax 612 626-7766, www.med.umn.edu/cme

American Society for Surgery of the Hand conference and courses

The American Society for Surgery of the Hand will hold its 2000 annual meeting "Overcoming Adversity: Hand Surgeons Shaping the 21st Century" from Oct. 5 to 7, 2000, in Seattle, Wash. The "Comprehensive Review Course in Hand Surgery 2000" will be held from July 28 to 30, 2000, in Dallas (Grapevine), Tex., and "Wrist Arthroscopy" will be held from Aug. 4 to 6, 2000, in Rosemont, Ill. For further information contact the American Society for Surgery of the Hand at Suite 600, 6300 North River Rd., Rosemont IL 60018-4256; tel 847 384-8300, fax 847 384-1435; www.hand-surg.org

Techniques in advanced laparoscopic and gynecologic surgery

The Mayo Clinic Scottsdale is sponsoring the 13th annual course "Techniques in Advanced Laparoscopic and Gynecologic Surgery." It will be held from Nov. 1 to 4, 2000, at the Grand Wailea Resort, Wailea, Hawaii (www.grandwailea.com). The course director is Dr. Javier F. Magrina. Credit: AMA Category 1 and ACOG (to be decided). Fees are US\$670. Contact: Sarah Dorste, CME Department, Mayo Clinic Scottsdale, 13400 East Shea Blvd., Scottsdale AZ 85259; tel 480