

### MUSCULOSKELETAL IMAGES. BONE AND SOFT-TISSUE TUMOURS

Conditions that mimic bone or soft-tissue tumours are relatively common but may be overlooked in the differential diagnosis of a soft-tissue mass or bone lesion. Such conditions include hematoma and infection. We describe 2 patients who presented with bone and soft-tissue lesions that were not neoplastic.

A 31-year-old man with a history of intravenous drug abuse presented with spontaneous onset of flank pain associated with a mass. Axial computed tomographic images of the pelvis (Fig. 1)

showed a heterogeneous right-sided soft-tissue mass involving the iliopsoas muscle and displacing small bowel, blood vessels and urinary bladder. A biopsy was performed, and a large hematoma was evacuated. Histologic examination of the specimen did not reveal evidence of malignant cells.

A 20-year-old man presented with a 6-month history of pain in the arm, weight loss and general malaise. On examination he had a tender mass anterior to the right shoulder associated with axillary lymphadenopathy.

Radiographs showed aggressive features in the diaphysis with endosteal erosion, periosteal reaction and cortical destruction (Fig. 2). Gadolinium-



FIG. 1. Axial computed tomographic scan of the pelvis.

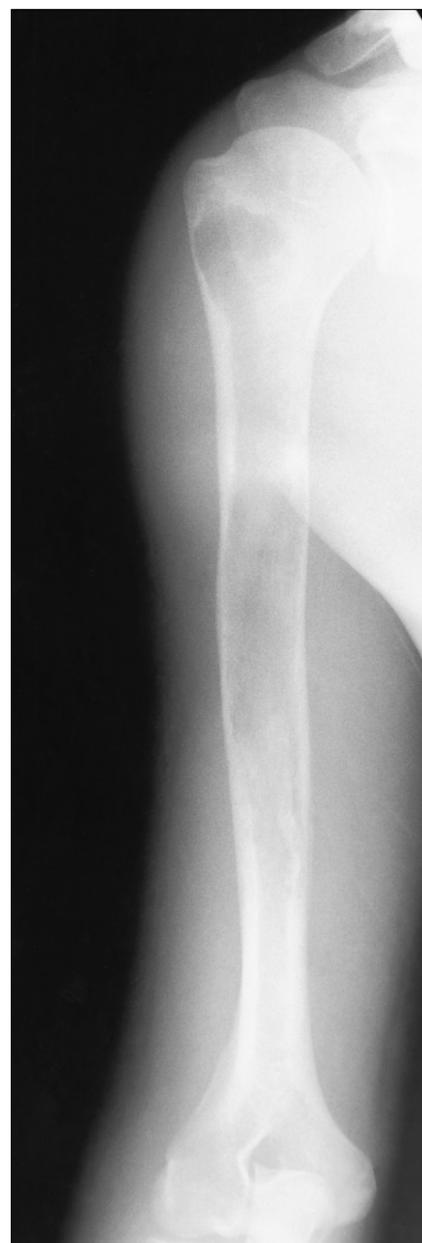


FIG. 2. Plain radiograph of the right humerus.

Section Editor: Robert S. Bell, MD

Submitted by Craig H. Gerrand, MB ChB,\* Philip Robinson, MB ChB,† and Anthony M. Griffin, BSc\*

\*University Musculoskeletal Oncology Unit, Mount Sinai Hospital, University of Toronto, Toronto, Ont.

†Joint Department of Medical Imaging, Mount Sinai Hospital and the University Health Network, University of Toronto

Submissions to Surgical Images, musculoskeletal section, should be sent to Dr. Robert S. Bell, University Musculoskeletal Oncology Unit, Ste. 476, 600 University Ave., Toronto ON M5G 1X5; fax 416 586-8397.

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enhanced magnetic resonance imaging confirmed the lesion seen on the plain film and on  $T_1$ -weighted imaging showed enhancing soft-tissue septae and low signal material within the medullary cavity in keeping with necrotic debris. In addition, an enhancing extrasosseous soft-tissue ab-

normality was demonstrated along the proximal metaphysis and diaphysis (Fig. 3). Imaging of the proximal humerus confirmed lymphadenopathy and an effusion of the glenohumeral joint (Fig. 4).

The differential diagnosis included Ewing's sarcoma. At biopsy, the hu-

meral shaft was opened using a small curette, and a large volume of purulent fluid under pressure was released. The canal and wound were irrigated with saline. *Staphylococcus aureus* was grown from cultures of the fluid. The patient's symptoms resolved after intravenous treatment with antibiotics. ■

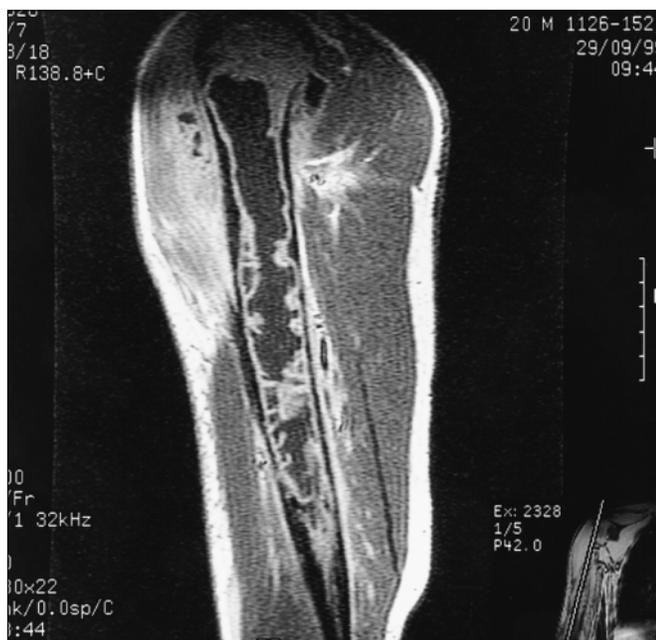
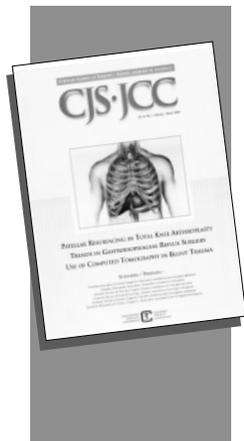


FIG. 3. Sagittal  $T_1$ -weighted magnetic resonance image after gadolinium enhancement.



FIG. 4. Axial  $T_2$ -weighted magnetic resonance image of the glenohumeral joint.



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