

Surgical Images

Imagier chirurgical

MUSCULOSKELETAL IMAGES. GRANULOMA OF THE BUTTOCK AFTER UNCEMENTED TOTAL HIP ARTHROPLASTY

A 75-year-old woman had undergone bilateral hip arthroplasty, the right side 8 years and the left side 2 years before she presented with a right-sided buttock mass. Fig. 1 shows well-fixed total hip components with a modular uncemented arthroplasty design on the right side. Computed to-

mography demonstrated a hypodense mass in the buttock (Fig. 2, arrows). The differential diagnosis included a soft-tissue sarcoma, but needle biopsy failed to yield diagnostic tissue. An open biopsy showed granulomatous inflammatory reaction. The mass was excised, and pathological examination

revealed a granulomatous response to metallic wear debris (Fig. 3, arrow).

The mass recurred quite rapidly and although both components were mechanically stable, the acetabular component was revised to a cemented, non-metal-backed cup and the femoral bone-cement interface was sealed with a cement gasket (Fig. 4, arrows). There has been no recurrence of the buttock mass in the 36 months since the revision operation.

Granulomatous lesions of bone, developing in response to prosthetic wear debris are well recognized, but soft-tissue granulomas of this size are very unusual.

Section Editor: Robert S. Bell, MD

Submitted by Jingnan Shen, MD, Anthony M. Griffin, Allan E. Gross, MD, and Robert S. Bell, MD, Division of Orthopedic Surgery, Department of Surgery, Mount Sinai Hospital, University of Toronto, Toronto, Ont.

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.

© 1999 Canadian Medical Association

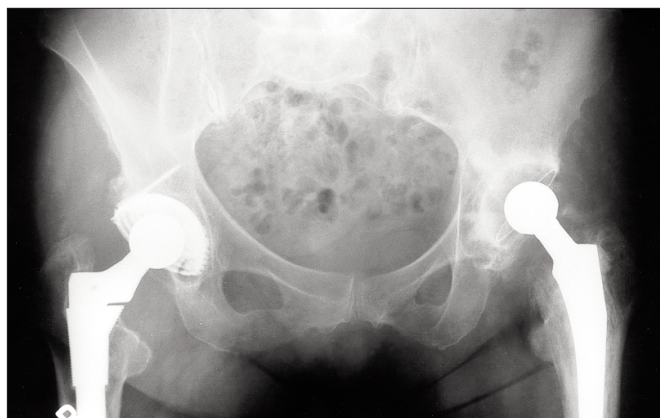


FIG. 1

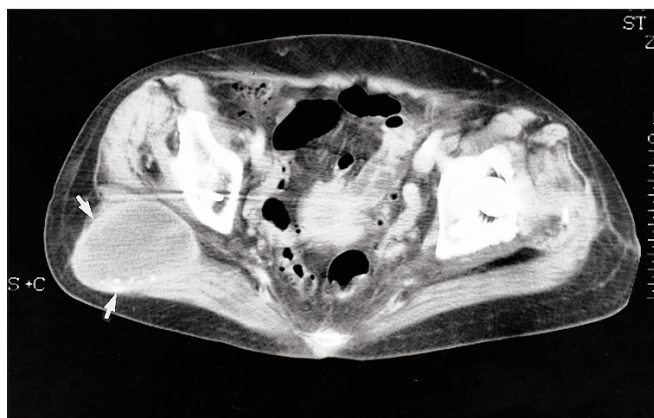


FIG. 2

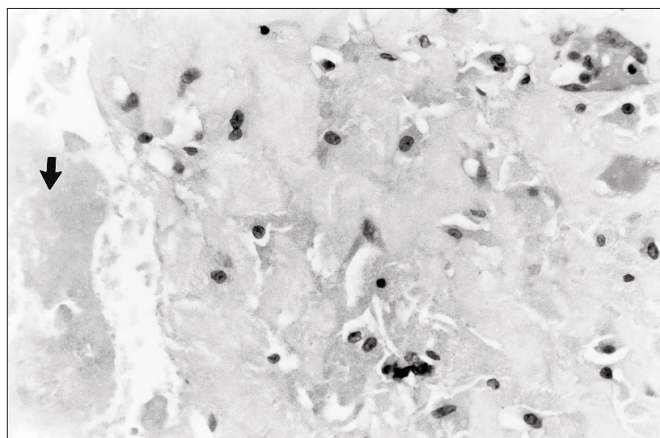


FIG. 3

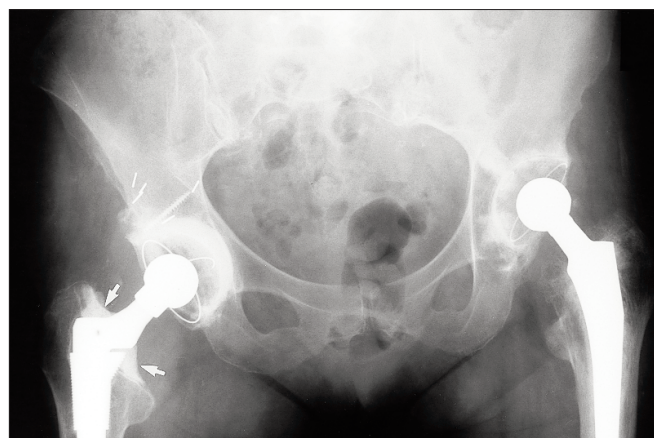


FIG. 4