

## Trochanteric Bursitis in Rheumatoid Arthritis

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We describe a case of giant trochanteric bursitis with bony erosion in the great trochanter. A 65-year-old woman with longstanding rheumatoid arthritis (RA) reported a recurrent cyst in the buttock. Her initial pelvic radiograph revealed a slight erosive change in the left great trochanter (Figure 1). A contrast medium was injected into the cyst, but it did not pass into the trochanteric bursa or the hip joint (Figure 2). Magnetic resonance imaging (MRI) revealed a large trochanteric bursa and a thin walled subcutaneous cyst presumed to arise from the bursa. Following gadolinium (Gd) administration, both the trochanteric bursa and the wall of the subcutaneous cyst with nonenhancing central component were enhanced, and both communicated with each other (Figure 3). The large bursa above the left great trochanter and subcutaneous cyst were resected. Communication between them was confirmed. Microscopic examination of the trochanteric bursa showed a change in the chronic inflammation of the synovial lining. One year after the bursectomy the cyst was no longer palpable or detectable clinically and the buttock was pain-free.

We concluded that the subcutaneous cyst developed from the trochanteric bursitis by a mechanism similar to that of a

popliteal cyst, which is frequently found in association with RA of the knee, and that surgical excision of the underlying bursa is essential to avoid recurrence of the cyst. As in this case, communication between the trochanteric bursa and the subcutaneous cyst was revealed by Gd enhanced MRI but not by contrast radiography of the cyst. Gd enhanced MRI was helpful not only for detecting the extent of the subcutaneous cyst, but for elucidating the underlying trochanteric bursitis communication with the cyst.

### REFERENCES

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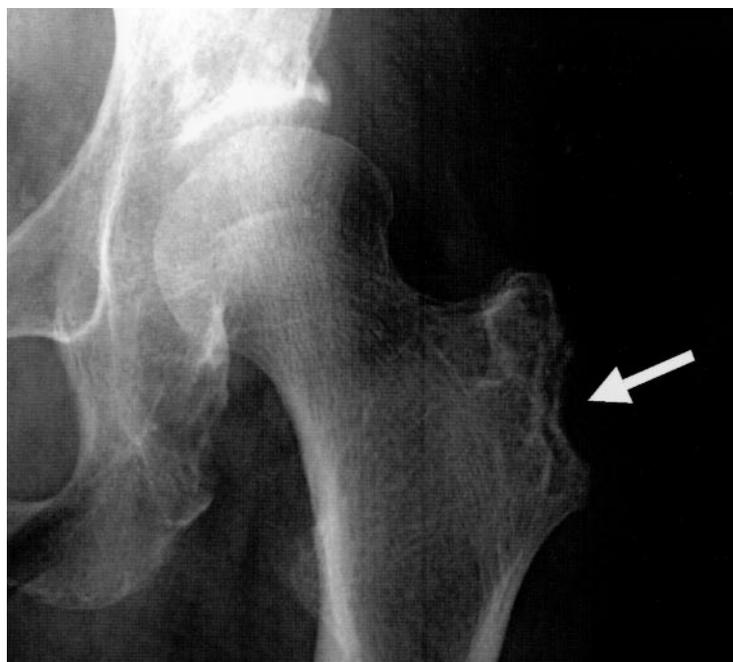


Figure 1. Left hip radiograph; bony erosion (arrow) is seen on the great trochanter.

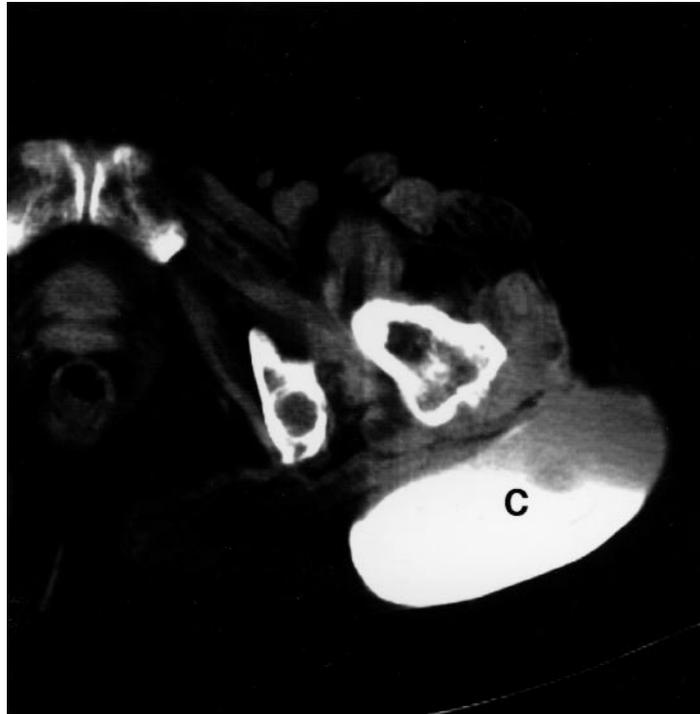


Figure 2. Computed tomography scanning of the pelvis. Contrast medium was injected into the subcutaneous cyst (C). A communication with the trochanteric bursa or the hip joint was not present.

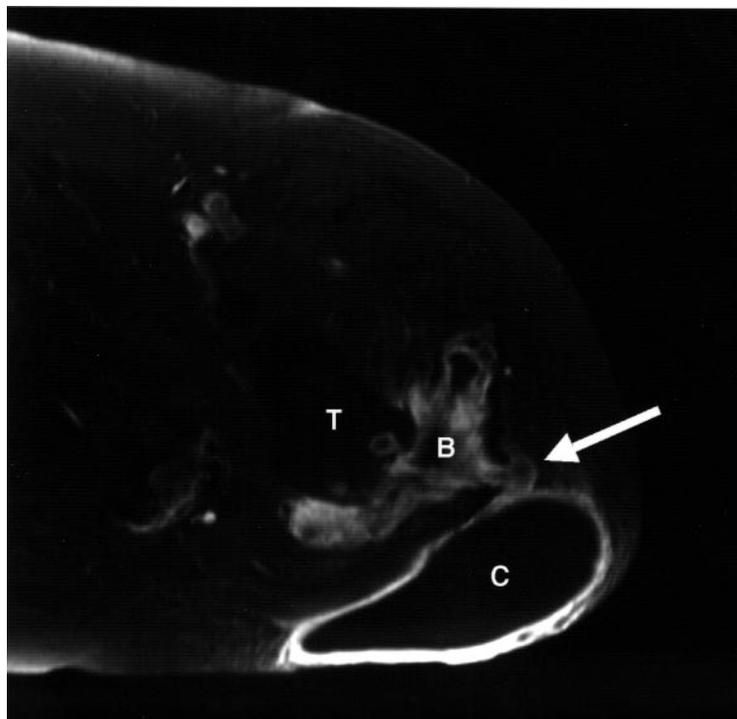


Figure 3. Gd enhanced MRI. The walls of the subcutaneous cyst (C) and the trochanteric bursa (B) are enhanced. There is a communication between them (arrow).