

Elbow Loose Bodies

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A 52-year-old right-handed woman, with occupational exposure to heavy cleaning equipment and newspaper delivery, presented to the Johns Hopkins Hospital emergency department in great distress. She had just exited the subway. While riding the train and holding a pole for stability, she abruptly developed excruciating pain and complete inability to flex or extend her left elbow.

Rheumatology consultation identified unilateral fullness of the left elbow, with tenderness upon active and passive range of motion testing. Elbow motion was limited to 65° flexion and 125° extension. There was crepitus in the contralateral elbow, but no other joint deformities or rashes were evident.

Laboratory studies revealed a normal leukocyte count and unremarkable inflammatory markers. Plain radiographs demonstrated joint space narrowing, osteophytosis, and ossific densities, i.e., “loose bodies,” posterior to the elbow joint (Figure 1, Panels A and B). Computerized tomographic imaging confirmed these findings (Panel C), together with multiple intraarticular loose bodies, including some in the olecranon fossa.

The elbow joint is infrequently involved in primary generalized osteoarthritis (OA)¹. Secondary causes include trauma, crystalline arthropathy, hemarthrosis, and septic arthritis. When present, elbow joint OA can contribute to radiodense loose bodies, as demonstrated in these images, and may abruptly impair articular range of motion with concomitant crescendo pain. Moreover, synovial osteochondromatosis is an uncommon etiology of numerous loose bodies, usually observed in the absence of joint space narrowing². Initial management of elbow OA with associated loose bodies is conservative. However, surgical intervention, including open or arthroscopic debridement, remains an option for refractory symptoms³.

REFERENCES

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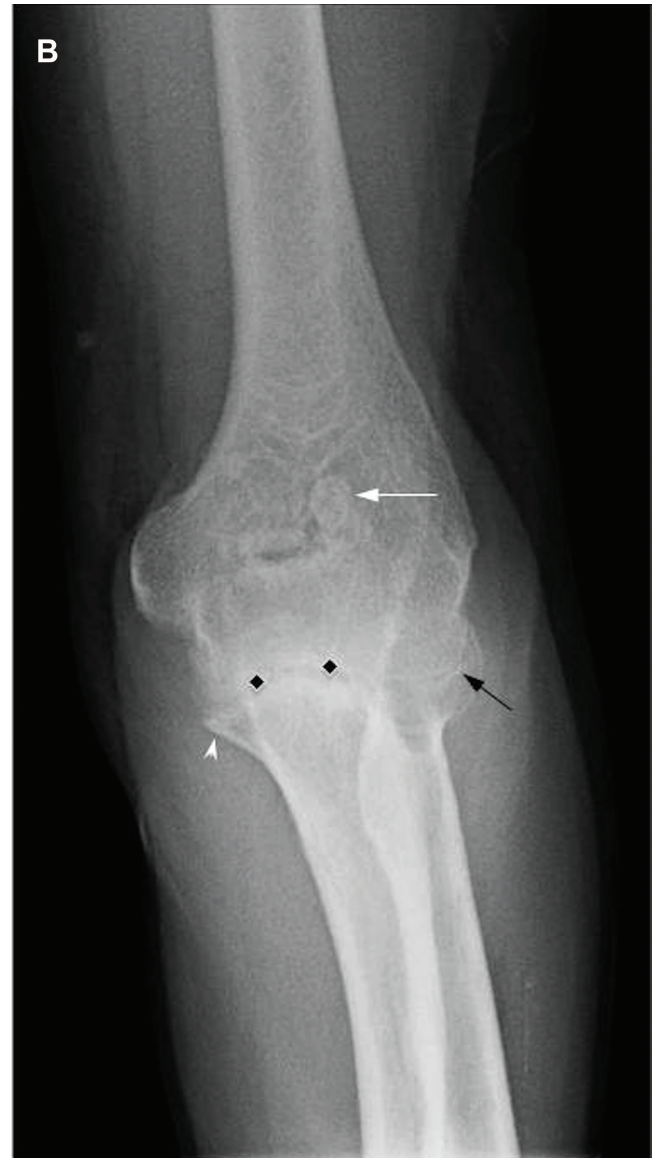
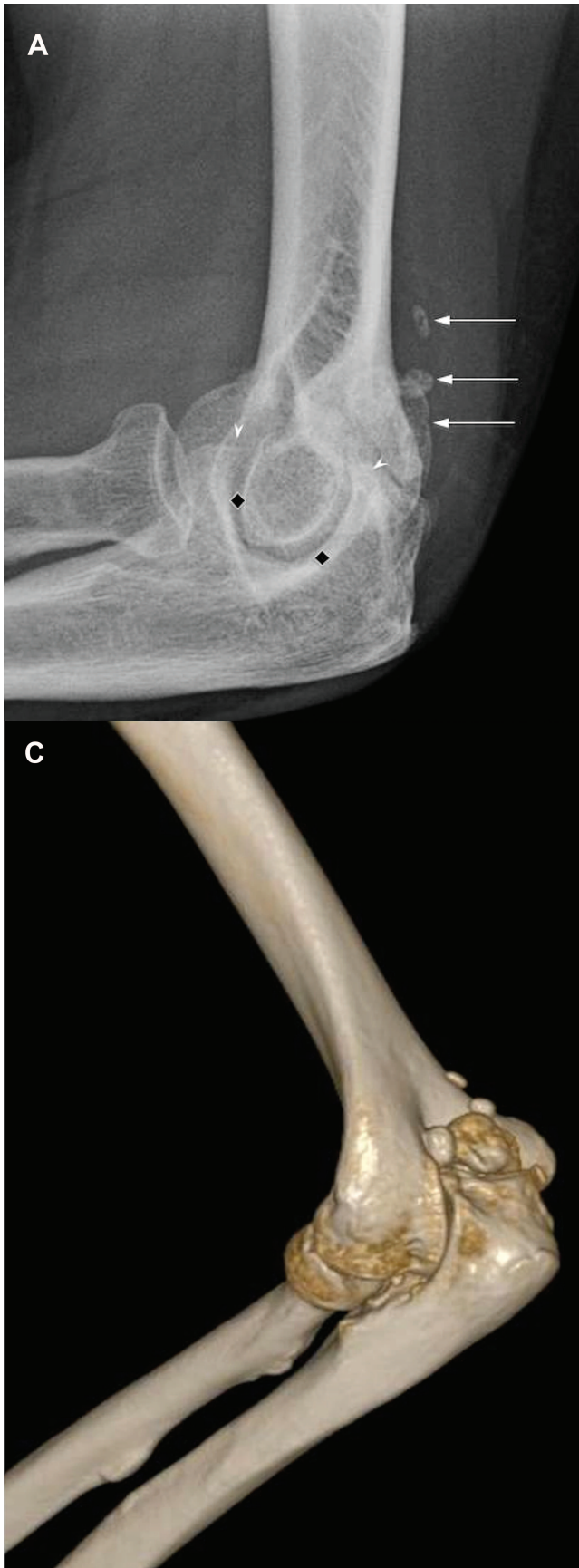


Figure 1. Plain radiographs [lateral flexion (A) and anteroposterior extension (B) views] demonstrated joint osteophytosis (white arrowheads), ossific densities posterior to the elbow joint (white arrows), and joint space narrowing (black arrow) around the humeroulnar (black-filled diamonds) articulation. Computerized tomographic imaging confirmed these findings, revealing marginal osteophytes at the radiocapitellar and humeroulnar articulations, moderate marginal osteophytes of the medial and lateral epicondyles (C), together with multiple intraarticular loose bodies, including some observed in the olecranon fossa.