

## The Dancing Hare (Milwaukee Hematoma)

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Milwaukee disease is a rapidly progressive destructive arthritis of the shoulders resulting from intraarticular crystal deposition; we describe a patient with rupture of a synovial cyst in the shoulder.

A 79-year-old man with a background of arterial hypertension, treated with amlodipine besylate and aspirin, was hospitalized because of progressive shoulder pain, swelling, and limitation. On admission, shoulder synovitis with large effusions on the left and severe tenderness on the right side, with medial right shoulder and right chest wall hematoma, were detected in the form of the “dancing hare” (Figure 1). The patient had no history of trauma. Inflammatory markers were increased (C-reactive protein 4.5 mg/dl; normal < 0.5) and coagulation tests were unremarkable. Radiographs showed endstage osteoarthritis of both shoulders, with soft

tissue swelling, calcifications around the shoulders, cartilage irregularity, and bone erosions (Figure 2). Periarticular soft-tissue nonlinear radio-opaque deposits situated separately from the bone are characteristic for calcium hydroxyapatite<sup>1</sup>. That is in contrast to intraarticular, linear, cartilage-related deposits (calcium pyrophosphate dihydrate) or bone-related enthesopathy (diffuse idiopathic skeletal hyperostosis). Chest computed tomography revealed bilateral rotator cuff rupture and glenohumeral joint synovitis. Arthrocentesis showed sparse mononuclear cytos and preserved mucin. No crystals were found and no infectious agent was cultured. Both shoulders were injected with betamethasone 6 mg. Colchicine therapy 1.5 mg/day was initiated.

Milwaukee disease proposed in this case was described by McCarty, *et al* in 1981<sup>2</sup>, and consists of the association of findings noted above. Calcium hydroxyapatite may be observed in synovial fluid (wet-drop alizarin-red staining, ordinary light, oil immersion, H 60)<sup>3</sup>. Milwaukee disease comprises rapidly progressive destructive arthritis of the shoulders due to intraarticular crystal deposition. A chest wall giant hematoma due to rupture of a shoulder synovial cyst in a patient receiving aspirin has not been reported previously.

### REFERENCES

1. Garcia GM, McCord GC, Kumar R. Hydroxyapatite crystal deposition disease. *Semin Musculoskel Radiol* 2003;7:187-93.
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Figure 1. Medial right shoulder and right chest wall hematoma are revealed by the characteristic “dancing hare” manifestation.



Figure 2. Radiograph shows endstage osteoarthritis of both shoulders, with soft tissue swelling, calcifications around the shoulders, cartilage irregularity, and bone erosions.