Spondyloarthritis as a Presentation of Gouty Arthritis

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We describe the case of a 62-year-old woman admitted because of acute (2 wks duration) and severe low back pain radiated to her posterior right thigh and increasing difficulty in walking. Her history included hypertension with mild chronic renal insufficiency (serum creatinine 1.7 mg/dl). Her medications were hydrochlorothiazide 25 mg qd and ASA 81 mg/day. Examination revealed an obese (158 kg) woman in distress and unable to bear weight or ambulate. There was marked decrease in range of motion of the lumbar spine and tenderness to palpation over the sacroiliac joints. Erythrocyte sedimentation rate was 120 mm/h, uric acid was 13.1 mg/dl; HLA-B27 and rheumatoid factor were negative. Imaging studies revealed destructive changes in the facet joints at the level of the dorsal and lumbar spine (Figure 1B) and bilateral asymmetric stage 3 sacroiliitis with bony sclerosis and punched-out subchondral cystic lesions within the articular surface (Figure 2B). The images were compared to a computerized tomography (CT) scan from a year earlier that had been normal (Figures 1A, 2A). CT guided biopsy of the left sacroiliac joint demonstrated a white chalky material that under polarized light microscopy revealed needle-shaped monosodium urate crystals (Figure 3). Colchicine was started and treatment was followed by clinical improvement.

Both sacroiliac joint and spinal involvement are increasingly recognized as unusual manifestations of gouty arthritis. The incidence of sacroiliac joint involvement in chronic gout, based on radiographic studies, ranges from 7% to 17%[1,2]. Gouty sacroiliitis, however, is rare, usually asymmetric, can be the presenting manifestation, and may have a rapid course to chronicity[3]. In contrast, spinal gout has been described in patients with severe chronic tophaceous gout, but may also occur as the primary manifestation in previously asymptomatic individuals. Most cases affect the lumbar area, about 30% have no history of gout, and in one case it was documented that only 3 months were required for tophi to develop[4,5]. This case highlights the potential variability of gout and describes an unusual clinical course.

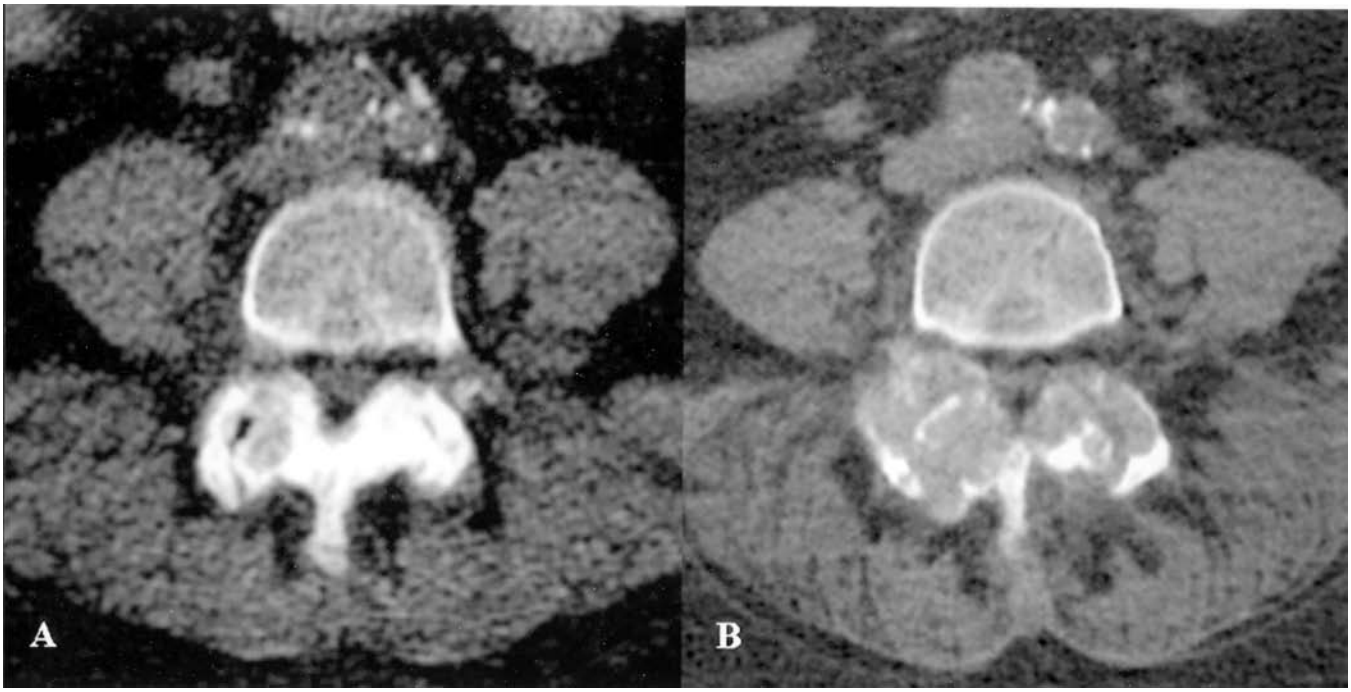

Figure 1. A. CT at L4-L5 level showing a cystic lesion with sclerotic margins at the right facet joint. Study performed 1 year prior to the diagnosis of tophaceous gout. B. CT at L4-L5 at the time of diagnosis. Note the increased size of the described lesion with bilateral involvement of the facet joint and lamina. Intracanal extension of the inflammatory process with associated canal stenosis. Narrowing of the L4-L5 foramen.

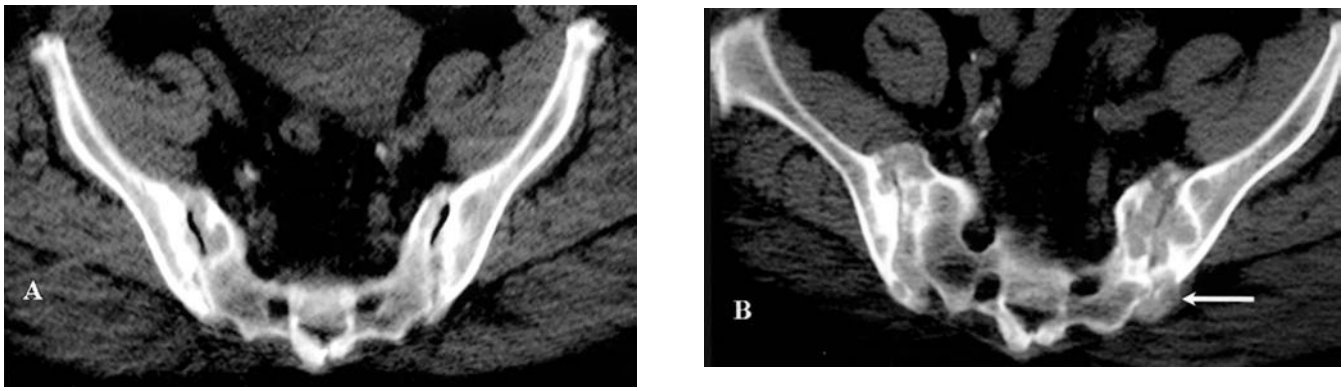

Figure 2. A. CT at the S3 level showing bilateral sclerosis of the sacroiliac (SI) joints with small erosions in both articular surfaces. Study performed 1 year prior to the diagnosis of tophaceous gout. B. CT at the S3 level at the time of diagnosis shows marked progression of the described changes. Sacroiliitis stage 3 (New York criteria). Bilateral widening of the SI joints and punched-out subchondral cystic lesions of varying sizes within the articular surface. Arrow indicates a tophus protruding into the adjacent soft tissues.

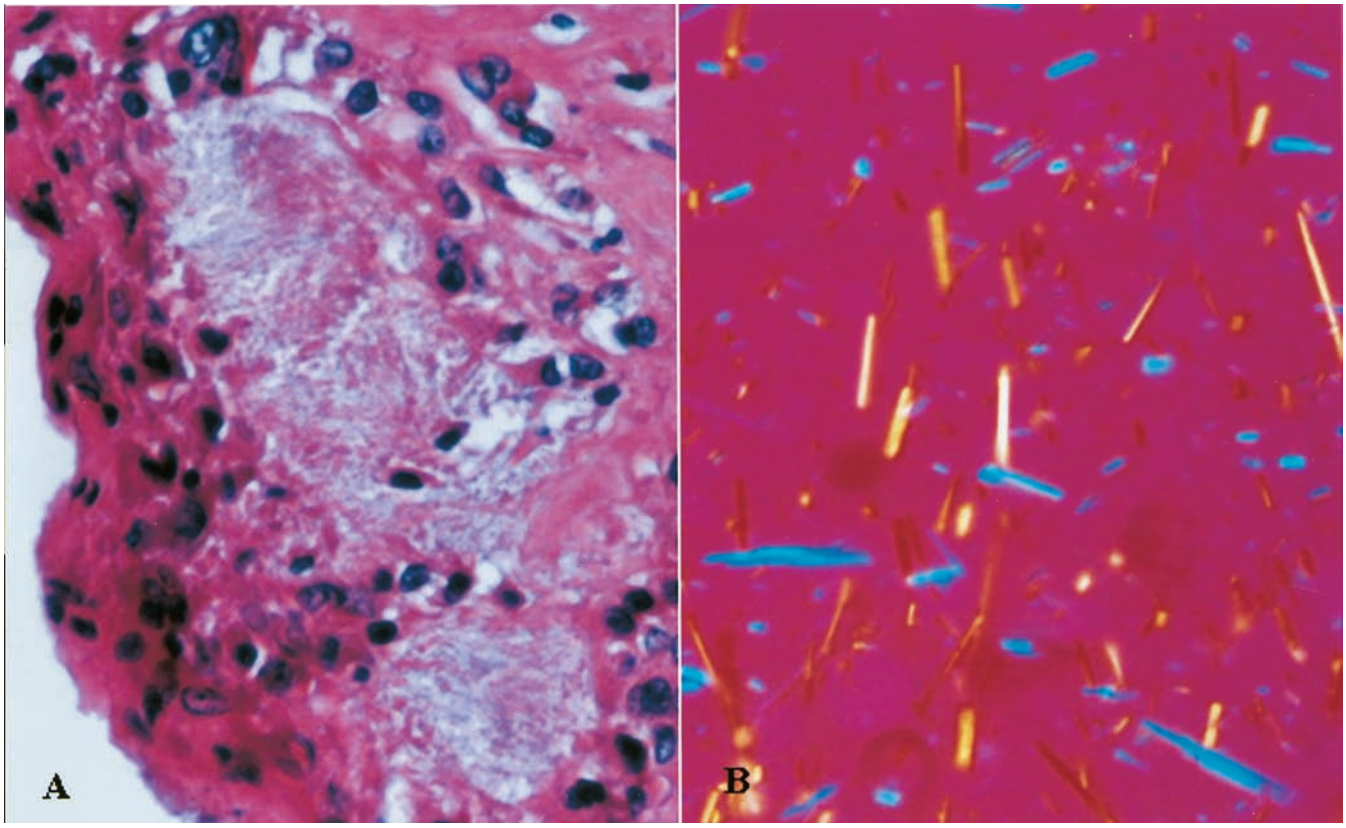

Figure 3. A, B. Histopathologic appearance of tophus formation and urate acid crystals revealed by polarized microscopy.

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