


Images in Rheumatology

Thoracic Clavicular Gout

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Gout is a common condition characterized by the deposition of monosodium urate (MSU) crystals in articular and nonarticular structures.¹ The formation of MSU crystals has been reported in atypical locations such as the eye, nose, spine, and viscera.² Here we report a rare case of a patient with gout with thoracic clavicular joint involvement, who was once misdiagnosed as having tuberculosis.

A 76-year-old man presented to our hospital with a painful 5 × 3-cm mass on the medial side of the right clavicle (Figure 1A) for 1 year. Previous computed tomography (CT) scan showed a low-density signal lesion in the right sternoclavicular joint. Biopsy of the mass showed necrosis, with tissue-like cells and inflammatory cells on the smear. Diagnostic anti-tuberculosis (TB) treatment with isoniazid, rifampin, and ethambutol for 1 month was ineffective. He had a previous history of gout and diabetes, no alcohol consumption, and no history of kidney disease or TB. After admission, laboratory examination showed that the erythrocyte sedimentation rate was 96 mm/h, C-reactive protein was 11 mg/L, and serum uric acid was 368 μmol/L. Subsequent

chest dual-source CT revealed a large number of MSU crystals around the right sternoclavicular joint and thoracic costal joint (Figure 1B). The smear of puncture fluid revealed a large number of MSU crystals under the polarized light microscope, negative for acid-fast staining or TB molecular test. The patient's pain was significantly relieved after the use of nonsteroidal antiinflammatory drugs and febuxostat.

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REFERENCES

1. Dalbeth N, Gosling AL, Gaffo A, Abhishek A. Gout. *Lancet* 2021;397:1843-55.
2. Forbess LJ, Fields TR. The broad spectrum of urate crystal deposition: unusual presentations of gouty tophi. *Semin Arthritis Rheum* 2012;42:146-54.

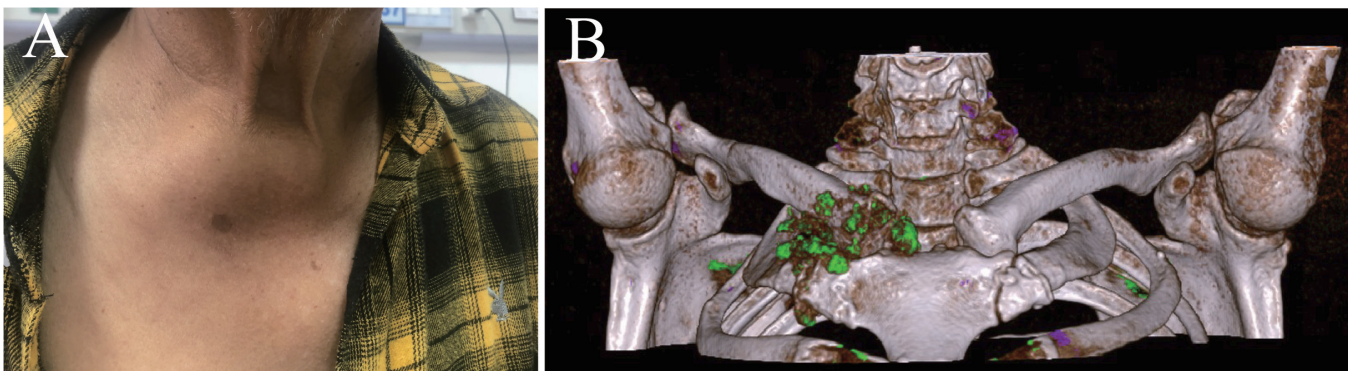


Figure 1. (A) A mass was observed on the medial side of the right clavicle, approximately 5 × 3 cm in size. (B) Chest dual-source computed tomography revealed a large number of monosodium urate crystals around the right sternoclavicular joint and thoracic costal joint.