

# AXIAL GOUT SIMULATING SPONDYLODISCITIS – CASE REPORT

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## BACKGROUND

Gout is an inflammatory arthropathy caused by the deposition of monosodium urate crystals in the joint tissues. It is a common arthritis in the population, especially in men. It usually presents as oligoarthritis of the lower limbs, mainly

in joints of the feet. Axial involvement is uncommon and its diagnosis can be challenging. We present a case of vertebral gout simulating spondylodiscitis.

## CASE REPORT

A 28-year-old male patient presented with oligoarthritis of the knees and ankles, severe low back pain and low-grade fever. The symptoms had started in the last 2 weeks. No triggering factor for the arthritis was identified but the pain was temporarily controlled with acetaminophen. The patient had no other symptoms. The laboratory evaluation showed elevation of inflammatory markers, leukocytosis and neutrophilia. A magnetic resonance imaging was performed in the knees, showing signs of synovitis with minimal joint effusion, and in the lumbar spine which showed erosions in the facet joints, erosions in the bodies of the fourth and fifth lumbar vertebrae (L4 and L5) with intervertebral disc signal change suggesting spondylodiscitis. A percutaneous vertebral biopsy was performed. The histopathologic analysis of

bone fragments from L4 and L5 showed monosodium urate crystals and no bacterial growth was observed in microbiological culture. The serum uric acid dosage was 10 mg/dl. The patient responded well to treatment with prednisone and subsequently controlled uric acid level with the use of allopurinol.

## CONCLUSION

Axial involvement in gout is uncommon and its diagnosis can be challenging. The clinical presentation is variable and the patient may be asymptomatic or present with acute back pain, radiculopathy, spinal cord compression. The presence of tophi increases the risk of neurological involvement. Constitutional symptoms such as fever and malaise may be present. The differential diagnosis is therefore broad. Bone resorption, erosion of facet joints and narrowing of the joint space are common imaging findings. The dual energy computed tomography study may be a useful diagnostic tool in the management of spinal gout, preventing the patient from undergoing surgical or percutaneous procedure. Despite rare, axial gout should be considered in the differential diagnoses of severe spinal pain.

**KEYWORDS:** Axial gout, spinal gout, spondylodiscitis, osteomyelitis, back pain.