

## A Rare Encounter Of Cervical Gout With Myelopathy: A Case Report

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### INTRODUCTION:

Gout, a purine metabolism disorder, is a common cause of inflammatory arthritis, which characterized by hyperuricemia leading to deposition of monosodium urate(MSU) crystals called tophi. It typically affects the peripheral joints of the appendicular skeleton but limited numbers of involvement in spine have been reported.<sup>1</sup>

### MATERIALS AND METHODS:

We report our experience of a 68 year-old man presented with recent onset of bilateral lower limbs weakness(L2-S1 power grade 3) and reduced sensation below chest. He has only medical history of diabetes mellitus and hypertension. Significant blood investigations were hyperuricemia (571  $\mu\text{mol/L}$ ; normal: 200–430) with mild elevated inflammatory C-reactive protein 8.48 mg/dL (normal: <5.0). Plain radiograph of spine was unremarkable. Magnetic resonance imaging(MRI) of spine revealed a posterior epidural lesion at C6-7 with concomitant C4/C5 and C5/C6 prolapsed intervertebral discs causing spinal cord compression.(Figure 1) There is no complain of back pain or peripheral joints pain.

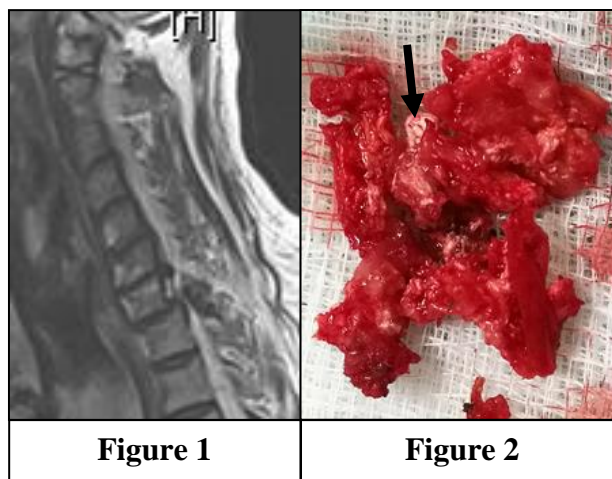
### RESULTS:

C3-T1 laminectomy with posterior instrumentation and posterolateral fusion was performed for the purpose of neural decompression. Intraoperatively, chalky white depositions(Figure 2: arrow) were found at the left C6/C7 facet joint and surrounding thickened ligamentum flavum which compressing on spinal cord. Histopathological examination of the specimen confirmed diagnosis of gouty tophi.

### DISCUSSIONS:

In spinal gout, depending on site of tophi deposition, symptoms can be presented as back pain, myelopathy or radiculopathy which simulating herniated disc, synovial cyst, arteriovenous malformation, degenerative stenosis and tumour.<sup>2</sup> The inflammatory responses of gout can mimic spondylitis or

epidural abscess. X-ray is unable to detect non-radiographically opaque MSU crystals, unless it is calcified. Computer tomography and MRI are more specific method, but lack the accuracy required for differential diagnosis.<sup>1</sup>



### CONCLUSION:

Spinal gout is not easily detected due to its various symptoms and radiological characteristics are not specific enough to establish a definite diagnosis. Hence, high index of suspicion can assist in diagnosis of a patient whom presenting with back pain or neurological findings with hyperuricemia or history of gout. However, histopathological, cytological or crystal analyses are the diagnostic gold standard.

### REFERENCES:

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