

Isolated Cervical Facet Arthropathy Secondary to CPPD: A Case Study



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Case Diagnosis

Isolated cervical facet arthropathy secondary to calcium pyrophosphate dihydrate crystal deposition disease (CPPD)

Case Description

57-year-old male with past medical history:

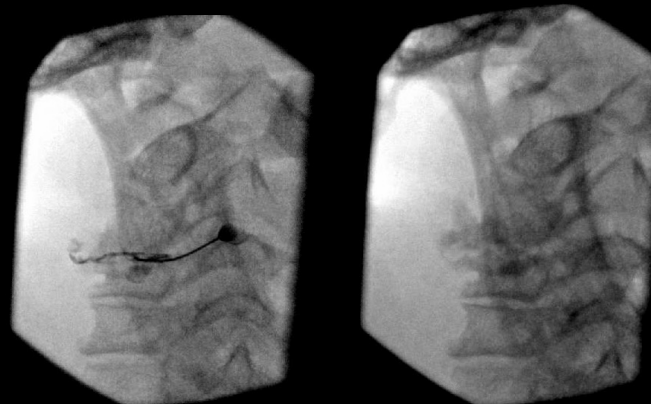
- hypertension
- stage III chronic kidney disease
- type 2 diabetes mellitus

Presentation:

- Acute onset, atraumatic left shoulder and neck pain, severe enough to prompt emergency department visit three weeks prior.
- No relief from topical diclofenac and opiates and was unable to take oral nonsteroidals due to kidney disease.
- Review of cervical CT obtained in emergency department revealed left C3-4 isolated facet arthropathy and a subchondral facet cyst.

Figure Group 1 (top): CT obtained in emergency department with small lucency at left facet joint of C3-C4

Figure Group 2 (bottom): 0.3cc of Omnipaque 300 was injected, which demonstrated intra-articular flow. No intravascular flow was seen.



Assessment / Results

Intervention:

- Intra-articular left C3-4 facet injection
 - 1cc 0.5% bupivacaine
 - 10mg dexamethasone
 - Under fluoroscopic guidance with contrast confirming intra-articular flow
- 75% improvement in symptoms immediately
 - Two months later, patient noted increased range of motion, improved sleep, and overall 60% pain reduction. Neck disability index improved 22%.
 - Patient was satisfied with this improvement and elected not to pursue further interventional treatment.

Discussion

This case of isolated severe cervical facet arthropathy with large cystic cavity inferior to the joint is thought to be consistent with calcium pyrophosphate dihydrate crystal deposition disease (CPPD). Alternative differentials include gout, although patient denied history in any peripheral joints, facet infection, malignancy, and arthritis secondary to rheumatoid arthritis or scleroderma.

Conclusion

We present a rare case of isolated cervical facet arthropathy secondary to suspected CPPD with successful improvement following intra-articular facet steroid injection.