

# Chronic Alcoholism Induced Charcot Arthropathy of the Knee: A Case Report

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## PRESENTATION

A 78-year-old woman with chronic alcohol abuse presented with worsening chronic right knee pain. The pain was along the medial joint line, characterized as constant and achy. It worsened with activity and improved with the use of non-steroidal anti-inflammatories.

Knee examination showed 30 degrees of varus deformity, medial joint line tenderness, and range of motion limited to 20-100 degrees, but no ligamentous laxity. Given worsening pain, the patient was wheelchair dependent for all mobility.

X-ray of the right knee revealed medial tibial plateau fracture and large medial femoral condylar osteochondral injury consistent with charcot joint. Metabolic and infectious workup was negative for diabetes and syphilis.



**Figure 1.** Weight-bearing anterior-posterior (AP) X-ray of revealed right medial tibial plateau fracture and large medial femoral condylar osteochondral injury.

## DISCUSSION

Knee Charcot neuroarthropathy is a rare, destructive arthropathy that is typically caused by autonomic, motor and/or sensory neuropathy<sup>1</sup>. Commonly, it is known to be associated with syphilis or diabetes<sup>2</sup>; however, other less common etiologies include alcoholism, leprosy, spinal cord injury, cerebral palsy, and syringomyelia.

The etiology of this patient's Charcot neuroarthropathy was likely secondary to her chronic alcohol use. Due to significant joint instability, patients are often referred for TKA.

Rehabilitation program should be structured similar to a traditional TKA; however, it is important to treat the underline cause of charcot neuroarthropathy to prevent further long-term complications.

## CONCLUSION

Knee Charcot neuroarthropathy is a rare clinical diagnosis that leads to significant functional deficits. To our knowledge, this is the first reported case of chronic alcoholism-related charcot neuroarthropathy of the knee.

Although this is managed surgically, it is important to consider the rehabilitation needs of this patient population pre- and post-surgery.

## REFERENCES

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