

TOTAL KNEE ARTHROPLASTY IN TERTIARY SYPHILIS NEUROPATHIC ARTHROPATHY

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Introduction: Neuropathic arthropathy, also known as a Charcot joint, is characterized by significant joint destruction and instability and presents as a major dilemma to orthopaedic surgeons. Charcot knee management includes conservative therapy, arthrodesis, and arthroplasty. Surgery should only be considered after failed conservative therapy. Total knee arthroplasty (TKA) is a viable option for treating Charcot knee with severe joint destruction as arthrodesis has limited outcome.

Discussion: A 56 years old male with known case of neurosyphilis for 30 years presented with progressively painless swelling of bilateral knees with instability and unable to walk for five years. There was no history of fever, trauma or fall. Upon examination, both knees revealed gross swelling, deformity and no local warmth or tenderness. There were bilateral thigh and calf muscles wasting, flexion deformity of right knee joint, loss of joint stability, sensory impairment, and absence of knee and ankle reflexes. The active and passive range of motion of right knee were 30 to 120 degrees and 0 to 100 degrees for left knee respectively. Investigations revealed VDRL reactive (titer=16), CSF VDRL reactive and serum TPHA positive (1:320 dilution). X-ray of left knee showed Stage 3 Modified Eichenholtz's classification of Charcot joint (stage of reconstruction). Patient underwent left TKA and postoperatively was uneventful. Patient was discharged well and able to ambulate with aid.

Conclusion: TKA provides a painless functional limb in patients with Charcot knee and not absolutely contraindicated in Charcot knee. Skills, methods and implant systems used are usually reserved for complex revision arthroplasties. Operative complications and benefits must be weighed out. In this patient, it was noted that TKA is more beneficial compared to arthrodesis. In order to observe whether TKA can be the treatment of choice for neuropathic knee, we are planning for long-term follow up to assess the outcome of arthroplasty.