

## CASE REPORT: SEVERE VALGUS KNEE TOTAL KNEE ARTHROPLASTY

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**Introduction:** Worldwide prevalence documented 10% of patients requiring a primary TKA present with a valgus deformity (VD)(1). In 2005, Ranawat described three grades of VD(1). A satisfying result in grade III valgus deformities is challenging even for experienced surgeons.

**Discussion:** A case of TKA of a 66-year-old female patient with underlying hypertension and ischemic heart disease presented with a grade III valgus arthritis with a valgus angle of 34°. The patient was presented in our outpatients' clinic unable to walk even with an aid and able to stand with support only for a few seconds with severe pain in the knee. The valgus deformity had evolved gradually over the course of the previous 6 months and the patient was restricted to a wheel chair over that period. There was complete instability in the mediolateral plane with fully nonfunctional medial knee stabilizers and tight lateral structures. The operation was conducted and a cemented constrained hinged knee prosthesis was implanted, through a medial parapatellar. Physical therapy on the third days post-operative on achieving full extension and flexion up to 90°. After 2 weeks, the patient presented in our outpatients' clinic able to walk for about 10 meters using a walking frame. She had regained the level of activity she previously had pre-operatively. There was no sagittal or mediolateral instability in the clinical examination. The maximal flexion was 90° and there was no extension deficit.

**Conclusion:** In conclusion, the treatment of valgus knee deformity with a TKA presents a number of challenges. We performed TKA using a rotating hinge knee instrument for the treatment of a valgus deformity angle >30° associated with severe bony defects in the femur and tibia. Postoperatively, the patient experienced quadriceps muscle rupture, which, however, was completely recovered in 2 months. Patients able walking frame on last reviewed after 3 months.