

TRUST YOUR WISDOM OR COMPUTER NAVI : POST TRAUMATIC KNEE ARTHRITIS

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Introduction: There is paucity in the literature regarding the effectiveness of total knee arthroplasty (TKA) for the treatment of post-traumatic arthritis. My patient 45 years old indian gentleman with underlying diabetes, hypertension and ischaemic heart disease presented with chief complaint of mechanical right knee pain associated with stiffness and locking sensation. Patient had history of right distal femur fracture 28 years ago and underwent plating. He also had his plate removed 2 years after the index surgery. On examination, healed surgical scar over anterolateral aspect distal knee extending to proximal tibia. Range of movement restricted 10-30 degree with shortening of right femur 2cm. Radiological examination revealed malunited distal femur fracture with posttraumatic knee arthritis.

Discussion: Under general anaesthesia patient underwent primary total knee arthroplasty with ultracongruent insert. Intraoperatively new midline skin incision was made with medial parapatellar arthrotomy. During exposure of the knee arthrotomy was extended with quadriceps snip and V-Y turndown. Bone cut was made as template preoperatively from radiograph. Distal femur was cut at 6 degree valgus angle and the femoral component was flex to downsize the component. Gap balancing was assessed prior implantation. Post operatively patient was able to achieve satisfactory range of movement and pain free.

Conclusion: Total knee arthroplasty is an effective treatment for post traumatic arthritis, as it improves functional outcomes, range of motion, and pain. Planning is of utmost importance when approaching this challenging surgery. The long-term clinical value of computer assistance for total knee arthroplasty is a point of ongoing controversy. Few reports describe the use of computer assisted orthopedic surgery as a method to decrease alignment outliers in total knee arthroplasty with associated posttraumatic deformities. However precision plan and great wisdom in maintaining proper rotation and alignment will follow with affirmative consequences.