

## Arthrodesis or Arthroplasty in a Painful Ankylosed Knee - A Surgeon's Dilemma

Santha Ruben, Surendran M, Ng MG, Shahrul A

Department of Orthopaedic, Hospital Tengku Ampuan Rahimah, Klang

### INTRODUCTION:

We present a case of left knee osteoarthritis with chronic knee stiffness with patella alta.

### REPORT:

We report a case of a 52yo gentleman, who had trauma to his left knee at 5 years old complicated with knee ankylosis. Presented to us after almost 5 decades of left knee stiffness and one year of pain. Clinically patient had severe wasting of quadricep and hamstring muscles and fixed knee extension at 0 degrees. On radiographs, joint space was reduced with severe patella alta and deformed femoral condyle. Patient wants a pain free knee with some range of flexion for him to drive. Left total knee replacement with VY quadricep lengthening was done. At 4 months postoperatively, patient achieved an active ROM of 10 to 60 degrees and good pain control with KSS score of 62.

### DISCUSSION:

Painful ankylosed knee can be a debilitating condition. Treatments include knee arthrodesis or knee replacement surgeries. Both procedures aimed at relieving pain with knee arthroplasty offering a more functional knee. Performing knee arthroplasty in an ankylosed knee is challenging in terms of exposure and functional outcome due to the severe muscle wasting and soft tissue contractures. In our case, a quadricep VY-plasty approach was used for adequate exposure and to address his severe patella alta. This approach can be associated with extension lag and knee extension weakness postoperatively which can be seen in our case.



Fig 1: preoperative x-rays show severe patella alta with deformed femoral condyle



Fig 2: post operative x-rays show total knee implant with corrected patella alta

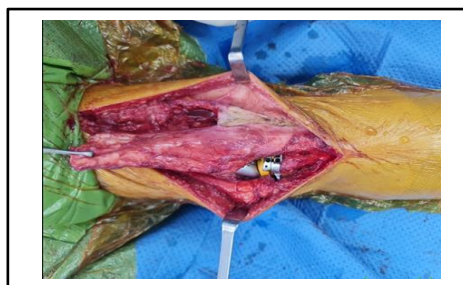


Fig 3: intraoperative picture shows a VY-plasty approach

### CONCLUSION:

Total knee arthroplasty in stiff knee can produce good results with improvement in function and should be considered before knee arthrodesis.

### REFERENCES:

1. Camanho GL. Total arthroplasty in ankylosed knees: a case series. Clinics (Sao Paulo).
2. Winemaker M, Rahman WA, Petrucci D, de Beer J. Preoperative knee stiffness and total knee arthroplasty outcomes. J Arthroplasty. 2012 Sep.