

A Challenging Case Of Patients Suffering From Severe Genu Recurvatum And Ligamentous Laxity Treated With Primary Rotating Hinge Knee Arthroplasty.

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INTRODUCTION:

Genu recurvatum is the most complex deformed arthritic knee to treat with total knee arthroplasty (TKA). In patient with severe genu recurvatum and ligamentous laxity the incidence of recurrence genu recurvatum following conventional or constrained condylar knee implant (CCK) TKA is high, often resulting in dissatisfaction and disability. To address this issue, the rotating hinge knee prosthesis (RHK) is a promising implant design. However only few literatures have reported the use of primary RHK in genu-recurvatum deformity associated with quadriceps-weakness patients. We report a case of severe genu recurvatum in the absent of neuromuscular disorder treated with primary RHK arthroplasty.

REPORT:

61 years old lady with underlying diabetes, and hypertension presented with painful severe genu recurvatum with joint laxity over her left knee. Her symptom worsened over the last three years, requiring her to ambulate in a wheelchair. On examination, she had genu recurvatum 20 degree, with laxity over the medial and lateral collateral ligament, as well as the cruciate ligament. Beighton score was 6. her quadricep muscle power scale was MRC grade 4.

After discussing the surgical conundrum of using RHK versus CCK implants, we agreed to use RHK due to the significant ligamentous laxity. Following surgery, the mechanical axis was restored, allowing for normal knee flexion and extension against gravity. She has a 0-120 degree range of motion and can stand using a walking frame.



Figure 1:



Figure 2:

CONCLUSION:

The majority of studies using RHK as a primary treatment have focus mainly on implant survival and recurrent recurvatum deformity rates, without considering patient outcomes. This report demonstrates that treating severe genu recurvatum with a main RHK prosthesis yields excellent results in terms of pain relief and functional improvement.

REFERENCES:

1. Chulsomlee, MD, K., Severe Genu Recurvatum Deformity Treated with Primary Rotating Hinge Replacement: A report of 2 cases. Journal of Southeast Asian Orthopaedics. 41, 3-4 (Mar. 2022), 23–29.