

# Post Traumatic Knee Stiffness, Role Of Quadriceplasty – Case Report

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## INTRODUCTION:

Post-traumatic knee stiffness and loss of range of motion is a common complication of injuries to the knee area. The causes of post-traumatic knee stiffness can be divided into flexion contractures, extension contractures, and combined contractures. Post-traumatic stiffness can be due to the presence of dense intra-articular adhesions and/or fibrotic transformation of peri-articular structures.

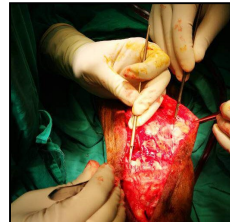
## CASE REPORT:

52 years old patient presented with complaint of post traumatic knee stiffness. He had history of comminuted patella fracture with had fixed by ORIF. Due to prolonged immobilization and poor compliancy to physiotherapy he sustained extension type post traumatic knee stiffness. On examination there was severe limitation ROM of left knee with movement around 5-30 degree. Despite on aggressive physiotherapy there was no significant improvement and the stiffness severely impaired his daily life work/activities. We perform quadriceplasty using Thompson procedure to release the adhesion. Physiotherapy was started immediately post-operative. On latest follow, the knee stiffness was significantly improved to 90 degree knee ROM.

## DISCUSSIONS:

Stiffness of the knee after trauma and/or surgery for femoral fractures is one of the most common complications and is difficult to treat. Stiffness in extension is more common and can be reduced by vigorous physiotherapy. If it does not improve then quadricepsplasty is indicated. Study by ZS Kundu et al 2007 showed Thompsons quadricepsplasty followed by a strict and rigorous postoperative physiotherapy protocol successfully increases the range of knee flexion. There was another quadricepsplasty namely Judet procedure. There were study done by Ali AM et all in 2003 showed Judet quadricepsplasty successfully

increases flexion range with minimum impairment of quadriceps function.



## CONCLUSION:

Posttraumatic knee stiffness is a very debilitating condition. There are role of quadriceplasty in cases of post-traumatic knee stiffness.

## REFERENCES:

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2. Hahn SB, Lee WS, Han DY. A modified Thompson quadricepsplasty for the stiff knee. *The Journal of bone and joint surgery. British volume.* 2000 Sep;82(7):992-5.