

# Bilateral Patellofemoral Instability

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## INTRODUCTION

Patellofemoral instability is changes in the normal physiological relationship between the patellofemoral joint and the femoral trochlear groove. There are several clinical causes that may lead to recurrent patella dislocation

## CASE PRESENTATION

49years old female, underlying chondromalacia of patella ( grade 4). Presented with bilateral knee pain for more than 20 years. Deny any history of trauma Examination of the knee shows varus deformity and inverted J sign. CT scan of the knee shows bilateral shallow trochlear groove (David Dejour Type A) The TT-TG measurement of the right knee is 19.8mm and left knee is 22.0mm. Modified Insall-Salvati ratio shows 1.5 on the right side and 1.7 on the left side. It shows features of bilateral patellofemoral instability.

## DISCUSSION

Patellofemoral instability in view of i increased tibial tubercle-trochlear groove distance or patella alta which will lead to lateral directd force wich causes the patellofemoral joint to be unstable. Patellofemoral instability without an acute knee injury,, may be associated with anomalies of the patellofemoral joint. These anomalies include trochlear dysplasia, patella alta, and lateralization of the tibial tuberosity (excessive lateral distance between the tibial tubercle and the trochlear groove). Patellar translation (TT-TG distance) is an analysis performed to quantify patellar instability. A distance of <15 mm is considered normal, 15-20 mm is considered borderline and a distance >20 mm is considered abnormal Physical therapy for patella instabilty helps to strenghten the gluteal muscle, the vastus medialis obliquus. Another choice of

conservative management will be patellar taping and bracing. Surgical choice of treatment for patellar instability will include econstruction of the medial patellofemoral ligament with autograft or allograft which is for patient reconstruction of the medial patellofemoral ligament with autograft or allograft..On the other hand, in patients who have an increased tibial tubercle-trochlear groove distance or patella alta, distal realignment will be done

## CONCLUSION

The causes of chronic patellar instability is multifactorial, and its treatment must therefore be personalized

## REFERENCES:

1. <https://radiopaedia.org/articles/patellar-translation-tt-tg-distance>
2. <https://pubs.rsna.org/doi/10.1148/rg.304095755>

