

## 16 Years, Follow-up of MPFL Reconstructions

Pieter Jordaan Erasmus, MBChB, MMed, SOUTH AFRICA

University of Stellenbosch  
Stellenbosch, Western Province, SOUTH AFRICA

### Summary:

Excellent results over a 16 year follow up period of MPFL reconstructions with gracilis tendon

### Abstract:

#### INTRODUCTION

We did a prospective follow up on 28 knees after an isolated MPFL reconstruction. We reported the results at 5 years, 7 year and now at 16.6 years.

In 1994 we postulated a theory, based on the well-established principle that "form follows function", that each individual patella best fits its trochlea in its original position. If this is correct, then in cases of recurrent patella dislocations the patella should be stabilized in its original position relative to its trochlea to have the best possible long term results. We developed a surgical technique using a free gracilis graft to stabilise the patella in its original relation to its trochlea.

#### INDICATIONS

The only criteria for surgery was recurrent patella dislocation. The only pathology surgically corrected was the torn MPFL. The q-angle, trochlea dysplasia, patella morphology, patella height and tight lateral retinaculum were ignored and not addressed during surgery. The only aim for surgery was to restore the patella back to its original position with a graft stronger than the original MPFL to compensate for underlying predisposing factors for patella dislocation.

#### TECHNIQUE

At the time of surgery a routine arthroscopy was done and if indicated a patella and or trochlear chondroplasty was performed. The MPFL was reconstructed with a double gracilis autograft. Special attention was paid to the tension in the reconstructed MPFL aiming to have a ligament that was tight in extension and lax in flexion while restoring it back to its original relation to its trochlea. If stable the contralateral patella was used as a parameter. Immediate full weight bearing was allowed with special attention to isometric quadriceps strengthening.

#### RESULTS

25 Patients average age 39.2 years (27- 48 ). 10 males and 12 females

Measuring instruments used were Kujala, Lysholm and Tegner

The average scores at 16.6 years were:

Kujala: 88.1 (48-100) Lysholm: 86.9 (55-100) Tegner: 5.5 (3-10)

There were two re-dislocation, one after 5 years in a first league rugby player. The other after 12 years, in a top international rugby player. Both went back to play at the same level after, reattachment of an avulsion from the medial edge of the patella.

The Kujala score showed a mild deterioration from 92 at 5 years to 88.1 at 16 years which is insignificant and can probably be explained by ageing in this cohort of patients

The Lysholm score showed no deterioration over 16 years, it was 82.5 at five years, 88.5 at 7 years and 86.9 at 16.6 years.

# ISAKOS

**International Society of Arthroscopy, Knee Surgery and  
Orthopaedic Sports Medicine**

10<sup>th</sup> Biennial ISAKOS Congress • June 7-11, 2015 • Lyon, France

---

## Paper #143

The Tegner score showed some deterioration from 7 at 7 years to 5.5 at 16.6 years. This deterioration is mainly age related and is in accordance with the finding of Briggs (AJSM)

### CONCLUSION

The functional results after an isolated MPFL reconstruction show only a mild deterioration over a 16 year period. This supports our theory that the aim in surgery should be to restore the patella to its original relation to its trochlea without addressing the underlying predisposing factors. The reconstructed MPFL is stronger than the original MPFL and in this way compensates to prevent a recurrent dislocation notwithstanding the uncorrected predisposing factors.