

Mediaalisen patellofemoraaliligamentin avulsio altistaa patellan instabiliteetille traumaattisen luksaation jälkeen

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Background

The clinical relevance of medial patellofemoral ligament (MPFL) injury location in primary patellar dislocation has not been studied. Prognosis after primary traumatic patellar dislocation may vary by MPFL injury location.

Study Design

Cohort study.

Methods

The initial magnetic resonance imaging (MRI) findings in 53 patients with identical nonoperative management were retrospectively analyzed for medial restraint injuries. The MPFL injury sites were classified as follows: femoral, midsubstance, and patellar. Magnetic resonance imaging was used to assess initial and control articular cartilage lesions in the patellofemoral joint. After a mean follow-up of 7 years, 42 patients were evaluated for redislocations, subjective symptoms, and functional limitations.

Results

Based on the initial MRIs, MPFL rupture was classified as femoral in 35 patients, midsubstance in 11, and patellar in 7. At follow-up, 15 patients reported an unstable patella (13 femoral, 1 patellar, 1 midsubstance; $P=0.01$) and 9 reported patellar redislocations (8 femoral, 1 midsubstance; $P=0.05$). The proportion of patients who regained their preinjury activity level was significantly smaller among those with femoral MPFL injury than among those with midsubstance or patellar MPFL injury ($P=0.05$). The median Kujala score was as follows: 90 for femoral, 91 for patellar, and 96 for midsubstance ($P=0.76$). Control MRI showed full-thickness patellofemoral cartilage lesions in 50% of the patients, unrelated to MPFL injury location.

Conclusion

An MPFL avulsion at the femoral attachment in primary traumatic patellar dislocations predicts subsequent patellar instability. The authors suggest that MPFL injury location be taken into account when planning treatment of primary traumatic patellar dislocation.