Medial Patellofemoral Ligament Reconstruction for Patellar Dislocation: A Systematic Review

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4555571/

Overall: The effectiveness of MPFL reconstruction for patellar dislocation.

Study:

- A meta-analysis was performed (which is combining the data from multiple studies)
- Kujala scores were also collected (a lower score means that the patient is in more pain or discomfort)
- There were multiple different types of studies involved
    - 2 randomized controlled studies
    - 3 parallel case studies (a type of clinical study where two groups of treatments, A and B)
    - 17 case series (a type of medical research study that tracks subjects with a known exposure, such as patients who have received a similar treatment, or examines their medical records for exposure and outcome)
- A total of 655 knees were used
    - 41 out of the 655 knees included in the study were patients studied after a first-time dislocation
- This meta-analysis studied a wide range of people aging from 11 to 52.
- The post-operative redislocation rate for the 17 case series = a mean of 2.4%
- First Time Dislocation Results:
    - These patients were 12 years or older
    - 21 knees underwent MPFL reconstruction
    - 20 knees underwent bracing for and physical therapy for 3 weeks
    - Two-Year Follow-Up:
        - Surgery Group: no new dislocations
            - Kujala Score = 88.9
        - Bracing and PT group: 7 dislocations
            - Kujala Score = 70.8
- Recurrent Dislocation Results:
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- Conclusion: the case series show that MPFL reconstruction presents high Kujala scores and low redislocation rate.

Generalized Knee/MPFL Information:

- Dislocation rate is higher in people ages 10-19 (31 out of 100,000 people)
- People who under-go non-surgical treatment after their first dislocation present a rate of recurrence at around 50%
- Common procedures to treat patellar instability:
    - Lateral Release
    - Trochleoplasty
    - Proximal / Distal Realignment Procedures
    - Or a combo. of these procedures
- MPFL Ligament - soft tissue (a ligament on the medial aspect of the knee)

- When the kneecap dislocates, it tears this ligament, which is why it usually needs to be reconstructed in surgery.
- MPFL Ligament Reconstructions are often used to treat recurrent knee dislocations