

Evidence Discussion (CMM-312 Knee Surgery-Arthroscopic and Open Procedures: Procedures for Patellofemoral Conditions)

Risks of surgical procedures for patellofemoral conditions include but are not limited to patellar fracture, recurrent instability, failure to improve, graft failure, loss of knee flexion, pain, wound complications, fixation device complications, hematoma, hemarthrosis, arthrofibrosis, infection, deep venous thrombosis, pulmonary embolism, and death, as well as complications related to risks of general and local anesthesia. **1, 2**

Given the potential possibility for significant complications, with overall cumulative complication rates of 26% in recent reviews, proper patient selection is crucial to minimize the risk-benefit ratio. **2**

Symptoms may include pain as well as mechanical symptoms such as blocked range of motion, weakness/giving way or buckling of the knee, or apprehension with certain motions. Supportive exam findings include joint effusion, medial patellar tenderness, painful / limited range of motion, positive apprehension tests, positive J-sign, pain with patellar compression and increased lateralization of the patella to manual mobilization. **3**

Imaging should confirm findings on MRI/ CT arthrogram and true lateral x-ray amenable to patellofemoral procedures including tear or avulsion of the medial patellofemoral ligament, trochlear dysplasia or tibial tubercle misalignment that corresponds to the patient's symptoms and physical examination. Radiographic findings on lateral x-rays document the extent of trochlear flattening based on where the trochlear floor crosses anterior to the lateral condyle, with a positive crossing sign, double contour and prominent trochlear spur indicating trochlear dysplasia. **4** Trochlear abnormalities have been found in 95% of knees experiencing a patellar dislocation event but only 3% of controls. **5**

It has been shown that many patients may improve with a course of conservative care and this may very well obviate the need for surgical treatment. **6** Non-surgical management for patellofemoral pain includes extensive physical therapy and muscle strengthening as well as taping, bracing, splinting and NSAID medication. Repeated treatments may be required along with close follow-up before surgical treatment is considered. **7, 8**

As risk for major complications exists, symptoms, physical exam findings and imaging findings should support surgical intervention. Although the use of any coverage criteria includes the possible risk of delayed care, EviCore firmly believes the benefits of our evidence-based criteria best ensure patient safety and highly outweigh any clinical harms.

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