

**APPENDIX: 19****TITLE: PATELLAR REDUCTION PROCEDURE****REVISED: October 15, 2014**

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**I. BACKGROUND:**

Dislocation of the patella is quite common. Lateral dislocation is the most common and may be caused by flexion and external rotation of the knee with simultaneous contraction of the quadriceps tendon. The quadriceps contraction pulls the patella laterally. Common mechanisms are rotational motion of the knee with a planted foot, often seen in volleyball, tennis, basketball, football, gymnastics, and dancers. Patellar dislocations are unlikely in patients with normal patello-femoral anatomy. Medial patellar dislocations are almost always associated with direct trauma to the patella and field relocation should be approached with caution due to the higher risk of associated fractures.

**II. SIGNS & SYMPTOMS:**

Clinically, patients will present with obvious deformity of the knee and a displaced patella. Swelling may be present. This injury is extremely painful.

**III. COMPLICATIONS:**

Fractures accompanying patellar dislocation are not uncommon, occurring in 28%-50% of patients. The vast majority of these occur when dislocation is associated with a direct blow to the patella. Intra-articular fragments can cause degenerative arthritis if not recognized. Therefore, it is important that all patients with patellar dislocation receive radiologic follow up, even if the dislocation is reduced. Significant hemorrhage into the joint may also occur. Recurrent dislocation is often a significant problem. The younger the patient at the time of the injury, the more likely a recurrent dislocation becomes.

**IV. PROCEDURE FOR PATELLAR RELOCATION:**

1. Palpate the patella for obvious deformity or crepitus. If obvious signs of fracture are present, **do not** attempt relocation. Splint the injury as found, ice the knee to prevent swelling, and transport to an appropriate facility for evaluation.
2. If possible, place the patient supine with the injured extremity elevated and flexed at 60-90 degrees. This will help relax the quadriceps muscle.
3. Smoothly and slowly straighten the extremity by lifting under the ankle. Light medial pressure applied to the lateral aspect of the patella may facilitate ease in reduction. The patella should “pop” easily back into place as the knee approaches full extension.

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4. If the patella is not easily reduced, the reduction may be obstructed by a fracture or hemarthrosis. Splint the injury, apply cold packs to reduce swelling, and transport the patient to an appropriate facility for further evaluation.
5. After reduction, the patient will generally experience almost complete relief of pain. Tenderness may be present along medial patellar and lateral femoral lines. The knee should be splinted and iced to prevent swelling, and the patient encouraged to have the joint examined at an appropriate medical facility.