

## Patella Instability (Kneecap Dislocation)

Patella (kneecap) instability is the act of the kneecap trying to come out of place in relation to the thigh bone (femur). Normally, the kneecap moves up and down within a groove at the end of the femur, as the knee is bent and straightened. A patella dislocation is the act of the patella jumping out of this groove, most often to the outer aspect of the knee.

Most patellar dislocations are non-contact injuries that occur when your foot is planted on the ground and then you twist or change direction. It can result from a direct blow as well. Those at risk for this problem are kids with underlying joint looseness, or laxity. Girls are at greater risk than boys. There are many anatomic factors that can place you at greater risk for patella instability.

### Symptoms

Symptoms of patella instability include:

- Pain on the inner side of the patella or thighbone
- Swelling within the joint that forms almost immediately
- May have difficulty straightening the knee
- Apprehension with movement of the patella, especially towards the outside

### Diagnosis

A diagnosis of patella instability can often be made based on your injury story and your physical exam. An X-ray should be done to look at the shape of the kneecap and femur groove, as well as to evaluate for small chips of bone or bone fractures. An MRI may be performed if there is concern for other injuries, especially the cartilage of the knee and to make a roadmap for potential surgery.

### Treatment

After a first time patellar dislocation, the kneecap will often return to its normal position spontaneously. If it remains dislocated, then it can be reduced by a physician usually be gently straightening the knee. Once in its normal position, you should be treated with a knee immobilizer to limit swelling and allow the kneecap to heal in the best position. If you have cartilage or bone fragments in the knee, then surgery should be done to remove or fix those associated injuries, otherwise surgery is usually not required for a first time dislocation.

Treatment should consist of knee immobilizer for four weeks and then physical therapy for six additional weeks. Return to sports once all motion and strength return.

If you have recurrent instability, then you are likely a candidate for surgical intervention. Surgery can include reconstruction of ligaments, realignment procedures for the bone and soft tissues or fixing cartilage and bone injuries depending on the MRI and physical exam findings.