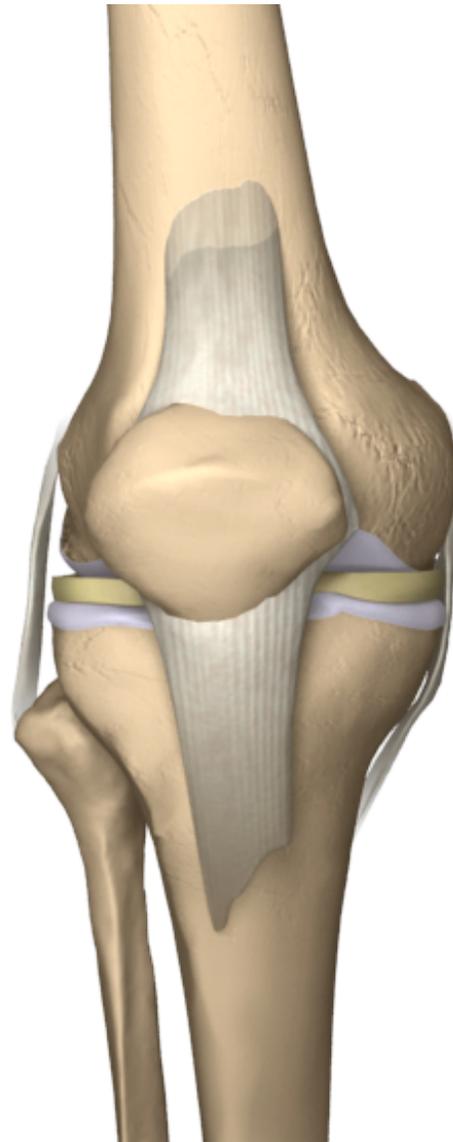


# MPFL Reconstruction

The kneecap or patella is a triangular-shaped free floating bone that is an important part of the knee joint. The patella rests in a groove on your femur called the trochlea, and glides smoothly in this groove when the knee bends and straightens. The medial patellofemoral ligament or MPFL is a ligament on the inside of the knee that helps to stabilize the patella in the trochlea by preventing it from moving or dislocating outward.

Patellar instability is a condition in which the patella slips out of the trochlea, either partially, called subluxation, or fully, called dislocation. The MPFL is usually torn or stretched in the process, making future dislocations more likely.

MPFL reconstruction is a commonly recommended surgical procedure for patients who have experienced repeated patellar dislocations. The surgery involves the reconstruction of the MPFL with the patient's own tissue or with that of a donor in order to stabilize the knee and allow the patient to return to normal activity.





### **Introduction**

The kneecap or patella is a triangular-shaped free floating bone that is an important part of the knee joint. The patella rests in a groove on your femur called the trochlea , and glides smoothly in this groove when the knee bends and straightens. The medial patellofemoral ligament or MPFL is a ligament on the inside of the knee that helps to stabilize the patella in the trochlea by preventing it from moving or dislocating outward. Patellar instability is a condition in which the patella slips out of the trochlea, either partially, called subluxation, or fully, called dislocation. The MPFL is usually torn or stretched in the process, making future dislocations more likely. MPFL reconstruction is a commonly recommended surgical procedure for patients who have experienced repeated patellar dislocations. The surgery involves the reconstruction of the MPFL with the patient's own tissue or with that of a donor in order to stabilize the knee and allow the patient to return to normal activity.



### **Arthroscopy**

You will be placed under either general or regional anesthesia. Regional anesthesia numbs the knee and is used with a light sedative so that you will feel as though you are sleeping. In order to determine if you have additional damage inside the joint, your surgeon will perform an arthroscopy during which small incisions are made around the joint and a camera or arthroscope is inserted. Images from the camera are projected to a video monitor, allowing your surgeon to see inside the joint. If you have damage to the cartilage around your patella, it will be removed or repaired using specialized surgical instruments.



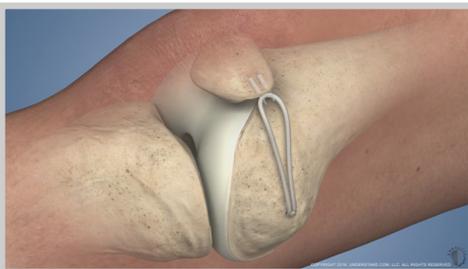
### ***Lateral Retinacular Release***

Depending upon your specific injury and anatomy, it may be necessary for your surgeon to perform a lateral retinacular release prior to your MPFL reconstruction. The lateral retinaculum is connective tissue on the outside of your patella. In patients with patellar instability, there can be abnormal outward or lateral pull on the patella that is caused by an overly tight lateral retinaculum. Cutting the tight lateral retinaculum may help to relieve this lateral pressure. Your surgeon will use an arthroscopic probe to split the lateral retinaculum.



### ***Graft Harvest and Preparation***

Next, your own tissue or that of a donor will be used as a graft to reconstruct your MPFL. This animation will demonstrate use of the semitendinosus tendon of your hamstring for the graft. Your surgeon will make a small incision and remove a portion of the semitendinosus tendon. The hamstring graft will be folded over to increase strength.



### ***Graft Insertion***

Your surgeon will make a small incision over the medial edge of your patella. Next, two anchors are placed into the patella. The central part of the graft is attached to the anchors. Next, an incision is made over your medial femur and a guide wire is inserted to help accurately drill the femoral hole. A drill is inserted over the guide wire and a new tunnel is created in the femur for the MPFL graft. Finally, the end of the graft is inserted and secured in the femoral tunnel using a bioscrew.



### ***Recovery and Results***

Typically, MPFL reconstruction is performed in an outpatient center and you should be able to go home the same day. Swelling and discoloration after the procedure are normal and will subside over time. You will be prescribed medication to manage your pain for the first few days and as needed. Your knee will be kept immobilized during walking and standing for six weeks after your surgery, and you will undergo physical therapy in order to help regain full function of your knee. Patients usually return to normal activity after approximately four months. Full recovery, including a return to sports, generally takes from four to six months. MPFL reconstruction has a high rate of success and patients typically experience great satisfaction with the results of their surgery.