About Knee MPFL Reconstruction for Patellar Stabilization

What is the MPFL reconstruction for Kneecap Instability?

The kneecap, called the Patella, connects the muscles in the front of the thigh to the shinbone (tibia). As you bend or straighten your leg, the kneecap is pulled up or down.

In a normal knee, the kneecap fits nicely in the groove. But certain injuries can cause it to be unstable and partially or completely dislocate.

Patients who continue to have patellar instability despite rehabilitation and bracing require surgery for stabilization. Reconstruction of the Medial Patellofemoral Ligament (MPFL), has a good track record for stabilizing the patella. It is performed with a combination of arthroscopic and open incisions, and uses a donated graft from the tissue bank.

Preparing for surgery

We'll have you stop certain medications before surgery, such as aspirin or anti-inflammatory medications (Ibuprofen, Naprosyn, Advil, Motrin, Celebrex, etc.) one week before surgery since they can cause bleeding. Depending on your age and medical history, we may have you see your regular physician and undergo some blood tests and an EKG before surgery.

What you can expect on the day of surgery

The surgery is performed in an outpatient setting, which means you can go home the same day. We'll have you arrive at the outpatient surgery center about one hour and a half before your surgery. The nurses will register you, shave and prep the surgery area, and place an IV and start the preventative antibiotics.

MPFL reconstruction surgeries are done under general anesthesia, which means you will be completely asleep and then wake up comfortably after the procedure is completed. The anesthesia doctor will also talk to you before surgery to review your medical history and answer any questions. Most patients also have an additional nerve block, to help keep the knee numb and comfortable for about 12-18 hours after surgery.

After surgery is over, you'll remain at the surgery center for about an hour to wake up from anesthesia. A friend or family member will have to drive you home to be safe, and someone should plan to be with you for at least the first 24 hours.

When you get home from surgery

We'll give you a sheet of specific postoperative instructions about what to do right after surgery, with information about pain medications and such. We like patients to relax at home for at least several days, using crutches for support. You'll be able to get up a bit and go to the kitchen or bathroom, but it's wise to rest and elevate the knee to decrease your swelling and pain.
You’ll be in a knee brace to keep the knee straight for 4 weeks after surgery, and you’ll be using crutches. At 4 weeks after surgery the brace will be unlocked and you’ll be able to wean off the crutches.

Recovery and Physical Therapy

You will come back to see us in the office one week after surgery. At that visit we’ll make sure your incisions are healing well and remove your sutures. We’ll usually have you come back and see us once a month for about two to three more months to make sure you’re healing well.

Starting after 4 weeks, you will start supervised physical therapy, two times a week for about an hour. The PT will continue for 8-12 weeks after surgery. Once you’ve made good progress in PT, you’ll be able to do the exercises you learned on your own or at the gym.

Getting back to work and sports after MPFL reconstruction

In order to be able to return to sports and fitness, you’ll need to take an active role in your rehabilitation to have good strength, endurance, flexibility and balance. The reconstruction takes about six months to heal, so that is the earliest we allow patients to return to sports. This may take longer in certain patients, depending on other factors such as other injuries or some early knee degeneration.

Getting back to work depends on the demands of your job. Sitting up for desk work can usually be started around a few days after surgery, especially if you can elevate the knee and use an ice pack at your desk. Before you can return to heavy work or standing all day long, it may be four to six weeks. Similar to sports, you cannot return to high-demand physical work, especially on irregular ground, climbing, etc., until the six month mark.

In order to start driving, you’ll need to be off of the narcotic pain medications, and you have to be able to control a car safely. It is difficult to drive or commute for the first 4 weeks due to the knee brace. For travel after surgery, it’s good to wait at least four weeks after surgery before a long plane flight or car trip, in order to decrease the chance of blood clots after sitting in one place for a prolonged time.

Long-term prognosis after MPFL reconstruction for Patellar Realignment

Surgery to reconstruction the MPFL to stabilize the patella has a good record of improving the stability of the patella. There are patients who continue to suffer pain behind the patella, usually due to cartilage damage behind the patella from the instability. The best way to improve that is to continue the physical therapy exercises to strengthen the quadriceps muscles.

Possible risks and complications

All surgery has risks of bleeding, infection, damage to nerves and arteries, stiffness, blood clots, further degeneration, and persistent knee pain. These complications are uncommon after ACL reconstruction, usually less than 5 percent of all patients. Most patients have some numbness near the incisions due to one of the small nerves in that area, that usually improves over time.

A significant concern after patellar realignment surgery is to regain full flexibility, and about 1-2% of patients have difficulty tolerating the physical therapy and require a second operation to break up the scar tissue. Rates of stabilization the patella are around 90%, which means that about 10% of patients can develop instability in the kneecap again. If that occurs, a second surgery would need to be performed.

The risk of severe complications from general anesthesia, such as death, heart attack or stroke, are very low, especially for patients with good general health.

Questions?

If you have any questions, be sure to call us at 925-600-7020.