Fraser Orthopaedic Institute &
Fraser Orthopaedic Treatment Clinic
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Medial Patellofemoral Ligament Reconstruction

Preparing for Surgery

- Getting healthy before surgery, eating a balanced diet, adequate hydration and rest.
- Smoking cessation program - quit smoking, stop using nicotine products. Nicotine use slows healing, increases risk of infection and contributes to an overall poor outcome after surgery.
- Making necessary changes to ones home for arrival post operatively: securing loose cords, removing potential tripping hazards, placing essential items at arms reach.
- Find a physiotherapist for post op therapy.
- Rent/purchase ambulatory aids and helper items: crutches, practical shoes etc. These items can be purchased at health stores, pharmacies and/or your local Red Cross.

What you should expect after your surgery?

- You will be admitted to the hospital the day of your surgery. Please ensure that you have nothing to eat or drink at least 8 hours before surgery.
- Take your regular medications (except for blood thinners and insulin) the morning of your surgery with a sip of water.
- When surgery is complete you will be cared for in the recovery room for 1-3 hours before being discharged on the same day of surgery.
- After surgery you should expect to be WEIGHT BEARING AS TOLERATED on your affected leg using crutches for 2 - 6 weeks post operatively.
- Medial patellofemoral ligament reconstruction can cause discomfort and pain post operatively. You will be provided with a prescription for pain medication on discharge from hospital. You should never take more medication (higher dosage or more frequently) than prescribed.
- It is acceptable to take acetaminophen (Tylenol) in combination with medications such as Oxycodone, you should avoid Tylenol medications if you are taking Tramacet, Percocet, Tylenol#3 or Emtec as they all contain Tylenol and too much can cause liver damage.
- Rest, elevation and ice can help with decreasing post op pain and swelling.
- Avoid Non Steroidal Anti-inflammatories (also known as NSAIDS) - these medications are recognized to slow and interfere with bone and soft tissues healing. Some examples include Advil, Motrin, Ibuprofen, and Naproxen.

Things you NEED to have for your Surgery/Recovery

1. Crutches
2. Someone to pick you up at the hospital after surgery (you will not be released on your own) and preferably someone who will stay with you for the first 24 hours after you return home

Things you might find Helpful for your Surgery/Recovery

1. Cryotherapy unit with ice
2. Practical shoes

Medical Equipment Rental

- Red Cross Rentals **www.redcross.ca**
- Orthopaedic Equipment **www.bonefoam.com**

Community Resources

- Health Link BC – Health Hotline Dial 8-1-1
- Health Link – **www.healthlinkbc.ca**
- Canadian Orthopaedic Association – **www.canorth.org**
- Osteoporosis Canada – **www.osteoporosis.ca**
- Physiotherapist Association of BC – **www.bcphysio.org**
- Physical Activity Line: Community Programs – 604-241-2266
- Physical Activity – **www.physicalactivityline.com**

Things you should avoid after your surgery

1. Non Steroidal Anti-inflammatories (also known as NSAIDS) - these medications are recognized to slow and interfere with bone and soft tissues healing. Some examples include Advil, Motrin, Ibuprofen, and Naproxen.
2. Avoid smoking – it has been shown to slow healing up to 30%.
3. Avoid rubbing creams or ointments (Antibiotic or otherwise) on the surgical site unless requested by your surgeon.

Follow-up

- Your first follow up visit will be approximately two weeks after your surgery at your orthopaedic surgeon's office/clinic. At this visit the surgeon will assess the healing of the wound and remove any sutures or staples that are present.
- Subsequent follow up visits will be arranged at 6-8 weeks, 12 weeks and 26 weeks post operatively. Additional visits will be arranged if required.
- You are expected to enroll in an outpatient physiotherapy program after your surgery. This program should begin between 7-14 days post op.
- Physiotherapy programs should focus on the following
    - 0-2 weeks - swelling reduction
    - 2-6 weeks - knee range of motion
    - 6-8+ weeks - progress strengthening of quadriceps, hamstrings and hip abductors

Potential Complications

Infection

Signs of infection include increasing redness, swelling, temperature and pain. All of these symptoms can occur normally in the post op period, the main differentiation between normal post op healing versus infection is that in normal healing these symptoms improve with time. Individuals with diabetes, smokers and those who have had a prior infection in this area are at higher risk of developing an infection. Potential infections should be reported to the surgeon's office. To help prevent infection you should wash your hands regularly, keep your incision site and bandages clean and dry. Do not touch, rub or scratch your incision site.

Blood clots

Signs of a blood clot in the leg include calf pain, swelling of the calf and/or foot. These can be normal post operatively and is particularly concerning if the swelling does not decrease with limb elevation. If one has the symptoms of a blood clot they should report them to the surgeon's office immediately. If it is after hours or your surgeon's office is closed, report to the Emergency Department.

Swelling and numbness

Are very common after a medial patellofemoral ligament reconstruction surgery. Swelling may last for prolonged periods following the operation. Limb elevation and ice therapy can help reduce swelling. If one experiences increasing numbness it is important to report this to the surgeon's office.

Failure to resolve all symptoms

Some pain, instability or stiffness may occur/persist even after a successful medial patellofemoral ligament reconstruction. It is important to appreciate that there are many different potential sources for symptoms.

Neurovascular injury

Numbness over the incision site is very common and will improve with time. Nerve injuries affect muscle control, sensory control, numbness and/or burning. Progressive numbness or weakness should be reported to your surgeon's office

Graft failure

The "graft" is the surgical tissue that replaces the ligaments. The graft may be an autograft – tissues donated from one's own body or an allograft – tissues taken from a cadaver. Just like the natural ligaments, both auto/allografts have the potential for failure. The failure rate is approximately 5%. A graft is considered failed if it ruptures or stretches. If the auto/allograft fails a revision surgery may be warranted.

Hardware irritation

Ligament reconstruction surgery requires the use of hardware such as screws or staples to fix the ligament graft to the bone. In some patients this can cause irritation and may potentially require removal after the graft has grown into the bone.

Reflex Sympathetic Dystrophy Syndrome
RSD (also known as Complex Regional Pain Syndrome) is an amplified musculoskeletal chronic pain condition characterized by throbbing in the leg, sensitivity to touch and cold, pain, swelling, temperature/color changes of the skin, shiny skin, muscle spasms and/or decreased mobility of the effected limb. Your surgeon will help create a treatment plan or may defer to your family doctor for ongoing management of these symptoms. This is relatively rare after ligament reconstruction surgery.

Donor site problems
The “donor site” is where the grafts for your surgery came from. Typically the donor site is the hamstrings, patellar or quadriceps tendon. One may experience pain, swelling or irritation in the region where the graft was taken, this usually resolves on its own with rest, ice and elevation.

Muscle atrophy
Is when muscles waste away due to disuse. It is common to experience muscle atrophy as a result of a ligament reconstruction or any other surgery. Specific strengthening exercises should be carried out with the physiotherapist to regain musculature.

Asymmetric gait
While recovering from a ligament reconstruction surgery there is the chance that disproportional loading of other parts of the body may take place (ankle, hip, back). This can lead to irritation of tendons, muscles and ligaments, which can be painful. This pain typically resolves without treatment once the normal gait pattern is restored.

Constipation
Difficulty or inability to pass bowel movements. Constipation is a common side effect of the pain medication you are given to help with postoperative pain. Ensuring that you eat a balanced high fiber diet (including bran, prunes, whole grains, fruits and vegetables) will help to prevent constipation. Remaining well hydrated is another great preventative measure for constipation. If constipation is ongoing or recurrent, laxatives may be prescribed. Contact your family physician or pharmacist if you are experiencing constipation for longer than 3 days.

Driving Protocol
The American Academy of Orthopaedic Surgeons recommends no driving for a minimum of 6 weeks post operatively, regardless of which side was operated on and whether your car is an automatic or manual - no driving is advised.