Posterior cruciate ligament tear

Ruptured PCL:

Debridement:

Repaired PCL:

Description
Posterior cruciate ligament tear is a sprain (tear) of one of the four major ligaments of the knee. The posterior cruciate ligament (PCL) is a ropelike structure that helps maintain the normal relationship of the femur (thigh bone) and the tibia (leg bone), so that the leg bone does not slip back over the femur. This ligament is the largest and strongest within the knee. When torn, this ligament may heal in a stretched-out position or it may attach to other structures of the knee via scar tissue.

Common signs and symptoms
- A pop heard or felt at the time of injury, an inability to continue activity after the injury, and significant knee swelling noticed within six to eight hours after the injury
- Inability to straighten the knee.
- Walking with a limp and the knee giving away or buckling, particularly the first several months after injury.
- Occasionally, locking when there is concurrent injury to the meniscus cartilage.
- Diffuse knee pain, usually in the front half of the knee, behind the kneecap, or in the very back of the knee; or pain above or below the kneecap.
- Pain is usually achy, but may be sharp.
- Pain that becomes worse when sitting for long periods of time, rising from a sitting position, going up or down stairs or hills, kneeling or squatting, or wearing shoes with heels.
- Pain when jumping.
- Difficulty running backward or backpedaling.

Causes
- Direct contact to the knee.
- Landing directly on the knee.
- Non-contact injury such as excessively straightening the knee.

**Risk of further injury**
- Sports that require repeated, forceful straightening or bending of the knee (such as kicking and jumping).
- Poor physical conditioning (strength and flexibility).

**PCL Non-Operative Instructions**

**Initial treatment**
- Use crutches until you can walk without a limp. You may put full weight on the injured leg.
- Range-of-motion, stretching and strengthening exercises at home.
- Nonsteroidal anti-inflammatory medications, such as aspirin and ibuprofen, or other minor pain relievers, such as acetaminophen, are recommended. Take these as directed by your physician.
- Cold should be applied for 10 to 15 minutes every two to three hours for inflammation and pain. Apply cold immediately after any activity that aggravates your symptoms.
- Wear your brace if the physician recommends one to protect the joint.

If your symptoms resolve with initial treatment, surgery will not be necessary.

**PCL Pre-Operative Instructions**

**Initial treatment**
Keep your leg elevated above the level of your heart as much as possible to prevent further swelling. Continue to use your crutches until you can walk without a limp.

**Brace**
Your physician may recommend a knee brace, especially if other ligaments are injured along with your PCL. Wear the brace as instructed by your physician or athletic trainer.

**Pain control**
Nonsteroidal anti-inflammatory medications, such as aspirin, naproxen sodium, and ibuprofen may be taken to relieve pain, but do not take these within seven days prior to your surgery. Other minor pain relievers such as Tylenol®/acetaminophen are often recommended. Take these as directed by your physician. Contact your physician immediately if any bleeding, upset stomach or signs of an allergic reaction occur.

**Swelling control**
Cold is used to relieve pain and reduce inflammation for acute and chronic cases. Cold should be applied for 10 to 15 minutes every 2 to 3 hours for inflammation and pain, and immediately after
any activity that aggravates your symptoms. Use ice packs, frozen vegetables or an ice massage. Cold compression may be helpful.

Rehabilitation and exercises
Rehabilitation of meniscus injuries usually focuses on reducing knee swelling, regaining knee range of motion, and regaining muscle control and strength. Avoid activities or sports that require pivoting, cutting, changing direction or jump landing. Range of motion, stretching and strengthening exercises may be carried out at home, although referral to a physical therapist or athletic trainer is recommended.

PCL Post-Operative Instructions

Diet
Start out with liquids and progress to your regular diet as tolerated.

Activity
Keep your leg elevated above the level of your heart as much as possible after surgery. Continue to use crutches until you can walk without a limp. Do not plan any strenuous activity until you have been cleared to do so by your surgeon.

Dressing
The elastic bandage dressing on your knee may be taken off 48 hours after surgery. The Band-Aid®/Steri-strips covering your wounds should be left in place and may be removed in clinic or left to fall off on their own. You may have some bloody drainage on the dressing and/or bruising and swelling around your wound, which may track down your leg. This is not unusual and is not a reason to be alarmed.

Showering
After the elastic bandage has been removed, you may shower. Wrap some clear plastic wrap around the knee for showering the first two weeks after surgery. Do not spend a long time in the shower. Do not submerge the knee in a bathtub or hot tub until instructed. Your brace may come off for showers. Walk with a straight “peg-leg” while out of the brace.

Weight bearing
Unless instructed otherwise, you may put full weight on your leg immediately after surgery. The crutches are used as training wheels. When you can walk without a limp, the crutches may be discontinued. This usually takes about 10-14 days.

Brace
When you are up and walking, the brace should be in a locked-in extension (straight), allowing you to walk with a “peg-leg.” When sitting or in bed, the brace may be unlocked.

Pain control
You are given a prescription for a narcotic pain medicine. This may be required to provide adequate pain control. No pain medicine prescriptions will be called in after business hours (8
a.m. – 5 p.m.). For the best possible pain control, follow these recommendations:

1. Attempt anti-inflammatory medicine and Tylenol first.
2. Take anti-inflammatory medicine as directed on the bottle. Examples include ibuprofen, Motrin®, Aleve® and Celebrex®.
3. Take Tylenol®/acetaminophen every four to six hours as needed.
4. If Tylenol does not work, try pain medicine as needed and use as directed on the bottle. Most pain medicines have Tylenol in them, therefore, do not take Tylenol while taking pain medicine. The anti-inflammatory medicine may be taken with the pain medicine without adverse effects.

Use caution when taking narcotic pain medicine because they affect your ability to drive and concentrate.

Swelling control
Decreasing post-operative swelling will greatly improve pain control and accelerate rehabilitation. For the first 72 hours, keep the leg elevated above the level of the heart as much as possible. Use the Cryo-Cuff® as often, making sure you add ice every hour to keep the water cold. Do not leave the Cryo-Cuff on while you are walking, as this leads to walking with a bent knee. You may sleep with the Cryo-Cuff on if this is comfortable.

Rehabilitation and exercises
For the first week after surgery, performing daily rehab is very important. Reduce your swelling with the Cryo-Cuff. Begin working on your range of motion by focusing on getting the knee all the way straight as soon as possible. Begin quad sets/straight leg raises as explained by your athletic trainer/physical therapist. If a significant effort is made with daily rehab exercises during the first three to four weeks, your knee will recover with better results. Outpatient physical therapy will be required and you will usually have two to three visits a week. This can be performed with a physical therapist in your area.

Remember, knee rehabilitation requires effort and discipline.

Notify our office if...

- Symptoms get worse or do not improve in four to six weeks despite treatment.
- New, unexplained symptoms develop. The drugs used in treatment may produce side effects.

Please call 859-323-5533 with questions or for more information.