

WHAT YOU NEED TO KNOW: ACL INJURIES



The anterior cruciate ligament (ACL) is one of four ligaments that hold the knee joint together. The ACL is important because it keeps the bones of the leg in place and helps prevent the knee from rotating abnormally which can lead to damage of the knee.

Injuries to the ACL are very common, especially in active children and youth. Sports like soccer and basketball that involve quick knee movements are common causes. The stress of pivoting, stopping and turning quickly can put strain on the knee and cause the ACL to tear.

How are ACL injuries diagnosed?

A torn or injured ACL causes the knee to be unstable which is usually accompanied by pain. Your child's doctor will diagnose a torn/injured ACL.

How are ACL injuries treated?

The type of treatment will depend on your child or youth's activity level, pain level, and range of motion. CHEO's orthopedic surgery team will discuss the best approach.

What happens during surgery?

Children and youth are ready to go home about 2-4 hours after the surgery is complete.

On the day of the surgery you will meet with your child's surgeon, anesthesiologist and nursing team. They will ensure your child is well enough to participate in the surgery and confirm you have followed the how to prepare for surgery instructions below.

During the surgery, your child will be given a general anesthetic to put them to sleep. Timing for this surgery varies.

How to prepare for surgery

- Do not take any anti-inflammatories (ibuprofen, naproxen, aspirin) for at least five days before surgery.
- Purchase or rent a pair of crutches and bring them with you on the day of the surgery. To learn about crutch walking, you can visit CHEO's website for a video tutorial. If your child has been prescribed a brace, bring this with you on the day of the surgery as well.
- Give acetaminophen (like Tylenol® or Tempra®) and over-the-counter cold medications or antibiotics as needed or prescribed.
- Tell your doctor if your child bruises easily, or if anyone in your family has had problems with anesthetic or bleeding tendencies.
- Make travel plans as necessary. If you live outside of Ottawa, you'll have to plan ahead. Visit www.cheo.on.ca for a list of accommodations near CHEO.

- Contact a physical therapist to arrange for physical therapy to start within 1-2 weeks after surgery.

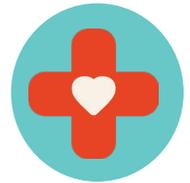
Pre-habilitation (pre-hab) therapy

Start a pre-operative rehabilitation (pre-hab) program with a physiotherapist as soon as possible before surgery. A stiff and swollen knee that does not have good range of motion at the time of ACL reconstructive surgery may have problems with post-operative rehabilitation. Research suggests that pre-hab provides better post-operative outcomes and improves range of motion.

Caring for your child or youth after surgery

Incision care

- Follow the surgeon's instructions on how to care for your child or youth's incision.
- Keep their bandage clean and dry if there is one covering the incision. The stitches are typically dissolvable and they do not need to be removed. Your post-operative instructions will inform you when to remove the dressing.
- Leave the Steri-Strips® (white tape) on until they fall off on their own in 2-3 weeks.



Bathing

- Your child or youth can take a shower after the wound has healed for five days. When you have your follow-up appointment, the surgeon will let you know when it is OK to submerge the leg in water. Avoid using soap, lotion or powders directly on the incision.



Medication

- Give Acetaminophen every 4-6 hours. Do not give more than five doses in a 24-hour period.
- Give other medications only as prescribed by your surgeon. Morphine or other pain medication may be prescribed.
- You may give Gravol for nausea and stool softeners for constipation if required.
- You can discuss with the anesthesiologists whether you would also like a regional nerve block, which can help with some of the initial pain in the early post-operative period. To learn more about regional anesthesia, please visit CHEO's website.



Activity

- Your child can put as much weight on their leg as they feel comfortable. If they had a meniscal tear repair (piece of cartilage in your knee that cushions and stabilizes the joint), their surgeon will ask them not to walk on their leg for six weeks. During your follow up appointment your child's surgeon will tell you when they can put more weight on the foot.
- Sometimes your surgeon will prescribe a brace to keep your knee straight. You will probably use this brace for 2-6 weeks after surgery. You can take it off while not standing on your leg (for example while resting, sleeping, or during physiotherapy and rehabilitation).
- Youth cannot drive until they have complete control of their leg and are off crutches. Usually this is not for at least 4-6 weeks after surgery.
- Physical therapy should start within the first 1-2 weeks after surgery. It is important to remember to



do the related exercises every day.

- Your child or youth cannot return to most sports until at least 6-9 months after surgery. They can begin jogging, cycling, and swimming before then. Your child's surgeon will see them prior to clearing them for sports activity.

Post-operative devices

Cryotherapy device: helps to reduce swelling and pain by circulating cold water around the knee. A frozen bag of peas or cold packs work just as well but might be less convenient.

Locking hinged post-op knee brace: might be prescribed by your surgeon to help with stability. These devices can be found from Ottawa retailers such as Kinemedics, Orthomedix, and Happy Brace Co.

Crutches: all patients will use crutches for 2-6 weeks following surgery.

When to seek additional help

For the most part, you should be able to manage your child's post-operative care at home. However, there are symptoms you should keep an eye out for that might indicate an infection or complication.

Call the orthopedic clinic immediately if you notice any of the following symptoms:

- a temperature above 38.5°C or 100.4°F by mouth
- excessive redness, swelling or drainage at the incisions
- your child or youth has abnormal, intense pain at the surgical site that is not managed with medications.

Contact information

Orthopedic clinic nurse (for general inquiries)

(613)-737-7600 ext. 2341

Monday to Friday, 8:00 am– 4:00 pm

Orthopedic nurse practitioner (for inquiries related to your child's orthopedic condition and post-operative care)

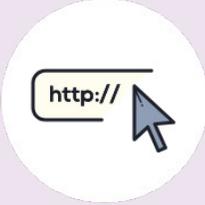
(613) 737-7600 extension 3556

Monday to Friday, 8:00 am- 4:00 pm

Orthopedic resident on call (for urgent concerns regarding your child's orthopedic condition)

(613) 737-7600 x 0 Ask to speak with the orthopedic resident on call.

After hours and weekends



Need more information?

[Cheo.on.ca](http://cheo.on.ca) is the best place to find information on CHEO's programs and services and learn about a variety of health topics for children and youth. Visit our online resource section to access CHEO-recommended websites, books, apps, videos and more!

Have you registered for MyChart?

MyChart is a **FREE** secure, online patient portal that connects patients to parts of their CHEO electronic health record, anywhere, at any time.

To apply for MyChart access, visit cheo.on.ca/mychart and fill out the MyChart Access Request Form. Once your application has been approved, we'll send you an email with an activation code and instructions on how to log in and get started.

