Anterior Cruciate Ligament (ACL) Injuries

What is the anterior cruciate ligament?
The ACL is a major ligament inside of the knee. It supports the knee and keeps the knee joint in place. Anterior means in front. The term cruciate means cross shaped. The ACL crosses from the back of the upper leg bone (femur) to the front of the shin bone (tibia).
The ACL can be damaged when the knee twists more than it can.
This type of injury often happens when a person:

- Lands off-balance after a jump.
- Suddenly stops forward fast movement such as during running.
- Suddenly twists and changes direction when moving.

What is an ACL injury?
ACL injuries often happen during sports that involve running, jumping, or fast stops and turns. Examples are football, basketball, soccer or skiing.
When the ACL tears, a pop or snap sound may be heard. The knee becomes unstable. As a result, your child may fall. Depending on the injury, your child may still be able to walk on the injured leg. Many times there will be a lot of swelling around the knee after the injury occurs. In general, a person will know right away that the ACL has been damaged because the knee joint will not feel normal.

How will it affect my child?

- ACL injuries can be painful. The pain may feel like it is coming from deep inside the knee. Most often, the pain will be felt on either side of the kneecap in a line that is just below the kneecap.
- Walking may be affected. Your child may say it feels like the knee is giving out or just doesn’t feel right.
- Swelling may occur. Your child may not be able to fully straighten the injured knee.
How is treated?

Treatment depends on the severity of the ACL injury.

- **Minor injury.** Your child will need to rest the joint. Keep the leg elevated and use an ice pack on the knee area to help reduce swelling. Ibuprofen may be taken to reduce pain. Your child may also:
  - Use crutches to help rest the joint.
  - Will learn exercises to help with range of motion and strengthening of the knee.

- **Severe injury.** If the entire ligament is torn or if there is other damage to the knee joint, surgery may be needed.

What is ACL surgery?

ACL surgery, called reconstruction, may be done.

- **Arthroscopic.** This method is used most often. A very small telescope with a light and a video camera attached to it is used. It is called an arthroscope. With an arthroscopic surgery, the incisions are small.

What happens during the surgery?

If reconstruction is needed, a new ACL is made from other tissue. The new ligament is made from the tendon that is over the kneecap or from the hamstring muscle in the leg. The new ligament is kept in place with screws or stitches.

What happens after the surgery?

Your child’s recovery will be longer if surgery is needed. You will learn special care for the incision. Return to walking and other activities will be slower. If your child needs surgery, you will be given further information about caring for your child at home after ACL surgery.

**ALERT:** Call your child’s doctor, nurse, or clinic if you have any questions or concerns or if your child has special health care needs that were not covered by this information.

This teaching sheet is meant to help you care for your child. It does not take the place of medical care. Talk with your healthcare provider for diagnosis, treatment, and follow-up.