

Limb-Length and Joint-Alignment Corrections

When there are mild to moderate differences in the lengths of a child's legs, or if a child has an abnormally aligned joint, a pediatric orthopedic surgeon can perform surgery to correct the condition.

Why Do Leg-Length Differences or Joint Misalignments Happen?

These conditions can result from:

- Limb fractures or growth plate injuries
- Differences in how a child's legs grow or develop, before or after birth
- Joint deformity
- Muscle contracture (a shortened, tight muscle)
- Genu valgum ("knock knees")
- Genu varum ("bow legged")

How Are Corrections Made?

Depending on your child's needs, a surgeon will perform one of two procedures:

- Epiphysiodesis

Through a surgical incision, the surgeon causes the growth plate in the bone to become permanently inactive. With a limb-length difference, the surgeon does this to the longer bone, and the shorter bone continues to grow, allowing it to catch up. Orthopedic surgeons can also do this procedure for children with deformities due to irregularities of the growth plate.

- Physeal figure 8 plating

The surgeon inserts a small figure-8-shaped metal plate over the growth plate, holding it in place with two screws. This temporarily slows growth on one side of the bone, allowing the opposite side to grow faster and gradually correct the deformity. After having this surgery, the child might feel the hardware under the skin.

Your physician will discuss which procedure is most appropriate for you and your child. Based on your child's age and the deformity that needs correction, your physician might prefer either a temporary or a permanent solution. For a successful correction, it's important that:

- The procedure is properly timed
- The child receives follow-up care

What Can We Expect After Surgery?

Most children go home the day they have the surgery, and they don't need ongoing therapy services. However you can expect that:

- A dressing and elastic bandage will cover the affected area.
- On occasion, your child might use a soft knee immobilizer for comfort.
- The joint might be stiff for a few days — or, in some cases, a few weeks — after surgery.
- Your child might feel uncomfortable when moving the joint nearest the surgical site, but this usually gets better with time.

What Follow-Up Care Should I Give My Child?

To help healing and lessen your child's discomfort, you should:

- Elevate your child's knee and ankle above the level of the heart, and apply ice. Do this for 24-48 hours after surgery to help decrease swelling.
- Have your child use crutches or a walker, if necessary, for three to five days after surgery.
- Give your child assistance, if necessary, to go up and down stairs.

When Can My Child Begin Activity?

Encourage your child to rest for the first few days after surgery. Then:

- Your child may resume simple activities and attend school within two to three days after surgery.
- Your physician might restrict certain types of activity for two to three weeks after surgery.

What Problems Should We Watch For?

Overcorrection is a potential problem. It's important to follow your physician's recommendations for follow-up. Growth can occur rapidly after surgery. If your child's deformity visibly changes before your next scheduled visit, please contact your physician's resource nurse so follow-up may occur sooner.

Questions or Concerns?

Contact your physician's resource nurse or call Telehealth Nursing at 651-229-3890.

[Make An Appointment 651-290-8707](#) [Refer a Patient 651-325-2200](#)

This information is for educational purposes only. It is not intended to replace the advice of your health care providers. If you have any questions, talk with your doctor or others on your health care team.

If you are a Gillette patient with urgent questions or concerns, please contact Telehealth Nursing at [651-229-3890](tel:651-229-3890).