Adductor Lengthening – Hip Muscle Release

Why does my child need this surgery?

Often, the hip muscles become very tight in a child with overly strong muscle tone (spasticity), and surgery is needed to release them. This may happen if your child has:

- tight adductors.

Adductors are muscles in the thigh that help the legs move toward each other. Very tight adductors can pull on the thighbone. Over time, strong pulling forces the ball at the top of the thighbone out of the pelvic or hip socket. This process is called subluxation. It can happen at any time, but the most common age is between three and six years old. If subluxation is fixed early, a surgeon can release the hip muscles, with no bone surgery needed. It is best not to delay this surgery because if the thighbone is pulled completely out of its socket, the child will need both bone surgery as well as hip muscle release surgery. These children will have a longer recovery time.

- difficulty “scissoring” the legs to walk.

Adductor lengthening surgery can help a child who is walking or trying to walk, but only “scissors” the legs by having the knees or feet get caught one behind the other so they can’t move the leg forward. Sometimes the problem fixes itself. Other children need surgery. Most children who have surgery for scissoring problems are between five and ten years old.

- difficulty spreading the legs apart.

Surgery can help children whose thigh muscles are so tight that it’s difficult to pull the legs apart for toileting and hygiene (perineal care).

What happens during this surgery?

Usually the surgeon cuts the strong adductor longus and gracilis muscles in the groin completely through and allows the ends to pull apart. They will gradually scar back together again. Most of the time, the adductor magnus muscle is not cut. It will take over the job of pulling the legs together.

If tightness is severe, the surgeon may partially lengthen the adductor brevis muscle and may also cut the front side (anterior branch) of the obturator nerve. Cutting this nerve helps to weaken tight muscles that are damaging the hip. The large iliopsoas muscle that flexes the hip may also need to be lengthened. The surgeon can use the incision that has already been cut. The iliopsoas is actually two muscles: the iliacus and the psoas. In children who are likely to be walkers, only the psoas is lengthened. In children who are unlikely to ever walk, the surgeon lengthens both the psoas and the iliacus.

What are the incisions like?

Small. The cuts measure between one and 1.5 inches, and are hidden in the crease of the groin.

What are the possible complications with this surgery?

An infection can happen with any surgery. Most are minor, treatable and do not delay recovery. Other complications are possible, though your child’s surgeon will make every effort to avoid them. These possible complications include:

- over-releasing the hip muscles. Over-releasing can force the legs open in a spread position, making walking and sitting difficult.
- over-correcting one hip and under-correcting the other. This can cause a “wind-swept,” lopsided appearance. It is also seen sometimes in people who never had surgery.
- injury to major nerve and blood vessels in the leg. This complication is rare.
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What happens after surgery?
After surgery, a dressing covers the incision. A clear plastic dressing separates the incision from the child’s diaper area. The sutures (stitches) used in surgery are self-dissolving and will not have to be removed. There is no cast. However, the surgeon may put your child in a brace or pillow device to keep the legs spread apart and stretched, especially for sleep.

Will my child have pain?
Yes, your child will need pain relievers and muscle relaxants at first. Our staff is trained to help make patients as comfortable as possible. Once you go home, please call the office if pain is a problem or if the pain medication your child’s doctor prescribed, causes side effects.

Will my child be able to walk once we go home?
If your child was walking before their surgery, they will be able to walk, but may need the extra support of a walker or crutches.

Will my child be able to ride in the car?
Yes. There should be no problem with car rides.

Will my child need physical therapy?
Yes. Therapists will work with your child in the hospital and give you a prescription to continue therapy after you go home. The therapy will focus on stretching, strengthening and walking. Therapy may begin right away, depending on what procedures were done. A social worker will help you arrange therapy. You can help by asking your insurance provider what your coverage is for physical therapy. Please try to do this before surgery if you can.

When will my child need to return to see the doctor or get x-rays?
The first visit after surgery is usually at four weeks. No x-rays will be needed.

When will my child be able to return to school and the school bus?
It varies, but most children are comfortable enough to return to school after two weeks. If your child has had more than one procedure, it may take longer. A lot depends on the length of the bus ride and whether the school can help make things easier for your child during recovery.

How long will it be until my child has completely recovered?
This varies too. Full recovery generally takes three to four months.

Will this surgery ever have to be repeated?
Maybe. If your child was young when the surgery was done and has strong spasticity that continues to over-tighten the hip, it is possible that lengthening surgery will be needed again during the teen years.