

## ***TENDON ACHILLES LENGTHENING / TAL GASTROCNEMIUS RECESSION***

### **Why does my child need this surgery?**

A tight Achilles tendon prevents a child from walking foot flat-instead; the child is on tiptoe. He may try to place the foot flat and only be able to do so by bending the knee back. This tightness is a result of the inability of the muscle/tendon to adapt to the child's growth, because of spastically.

The initial treatment for this problem involves physical therapy and bracing, typically a MAFO (molded ankle foot orthosis.) When the brace no longer keeps the foot flat, is too uncomfortable, or the child is of an age to warrant discontinuing the brace, surgery is recommended.

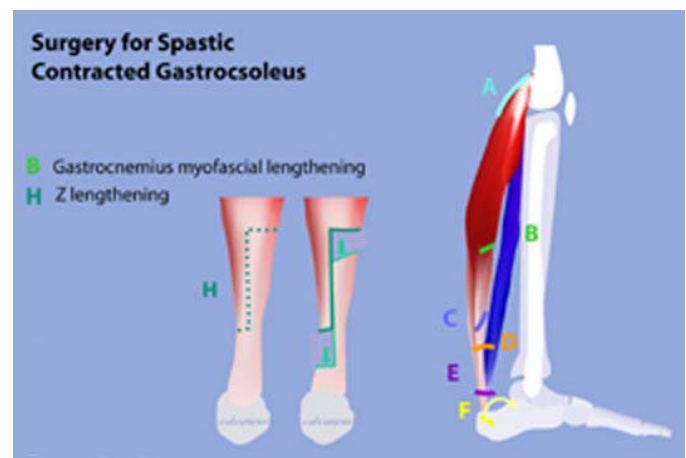
The Z-plasty lengthening is preferable. It involves an open incision behind the ankle, which exposes the tendon ; a Z-cut is made in the tendon and the tendon is stretched apart and then sutured. This allows the most controlled lengthening of the whole tendon and muscle. This procedure is termed an achilles tendon lengthening.

A third method used for less severe contractures, involves identifying just the gastrocnemius muscle and loosening its fibers, leaving the soleus muscle untouched. This is called a Gastrocnemius recession.

### **What does the surgery involve?**

The Achilles tendon is located behind the ankle and is attached to the gastrocnemius and soleus muscles Which are located just above, in the calf. There are several methods that surgically address the problem of contracture:

The percutaneous tendon lengthening involves making several small stab wounds through the skin and nicking the tendon in several places so that it tears and is then longer. It heals back in place. We do not use this procedure because it does not provide the surgeon with very much control over the amount of lengthening, it is a "blind" procedure.



## **What are the incisions like?**

Both incisions run lengthwise and are generally about 2 inches in length. They are placed toward the inside of the leg to be less noticeable.

## **What happens immediately after surgery?/casts?**

Cast/s (below the knee) are placed in the operating room, immediately after the surgery. The casts are then “soled” later that day or the following day, in the Cast Room, so that the child may walk in the casts.

## **Will my child have pain?**

Yes, however, the pain will be controlled with pain relievers and muscle relaxants. If, after your child returns home, you feel that he/she is having inappropriate pain or side effects from the medications, please call the office.

## **Will my child be able to walk?/activity at discharge?**

Initially a child needs a bit of assistance to stand and walk, particularly if other muscles/bones have been addressed in the surgery. However, most children are walking in their casts within the week, if this was their only surgery. Their activity is as tolerated, with the exception of not being able to get the casts wet.

## **Will my child be able to ride in the car?**

There should be no difficulty with positioning the child for car rides.

## **Will my child need physical therapy?**

Yes, there will be some therapy to assure that the child can walk in the casts. However, the real gains in the therapy will come after the casts are removed and the therapists focus on the proper gait and maintaining the correction with stretching.

The social worker will help with arranging for therapy. However, individual insurance coverage will often dictate what therapy is possible. It is very helpful for families to inquire about their coverage prior to surgery in order to facilitate the process of obtaining what is needed for their child.

## **When will my child need to return to see the doctor/x-ray?**

Your child will return in 3-4 weeks for the cast/s to be removed, no x-rays are needed. Typically the child remains free of braces when the casts are removed. However, after 4 weeks the child is re-checked and if he/she, out of habit, is walking up on their toes, a brace is prescribed to discourage this and to maintain the correction. Some children need a brace for stability as well. Typically, the brace prescribed has a hinge at the ankle allowing the child to raise the foot, but not to drop it to walk on tiptoe.

## **When will my child be able to return to school?/bus?**

This can be quite variable . The child's comfort level is the determining factor. This surgery tends to require at least one to two weeks before a child is comfortable to ride the bus and be at school for the day. A good deal of the variability is dependent upon the child's comfort in the school setting, the length of the bus ride and the ability of the school to accommodate the child's needs. These are the limiting factors in the return to school.

## **How long will it be until my child has completely recovered?**

If this is the only procedure, the child is completely recovered in 3-6 months.

## **Will this surgery ever need to be repeated?**

It is possible. If a child is between the ages of 3-5 there is a 25 to 30% can of needed to repeat the lengthening between the ages of 9-12, due to the child's growth.

## **What are the possible complications associated with this surgery?**

Skin incision infections can occur. However, they are usually minor and do not delay recovery. Over-lengthening of the Achilles tendon is a serious complication, especially for children who walk. Using the open procedures described above minimizes the chance of this occurring.

