A Patient's Guide To Gastrocnemius Release Surgery



What constitutes the calf muscle?

The calf is made up of two muscles, the gastrocnemius and soleus. The gastrocnemius is the larger and longer of the two muscles. It has two separate heads, which attach from the bottom of the thigh bone (femur). The gastrocnemius and soleus muscles join to form the Achilles tendon which goes on to attach to the heel bone.

What happens with calf tightness?

Tightness in calf the calf muscle / tendon complex can cause:

- Tension in the Plantar Fascia (causing plantar fasciitis / fasciopathy)
- Tension in the Achilles tendon (causing tendinopathy)
- Flat foot deformity associated with other muscle / tendon weakness
- Forefoot overload (metatarsalgia) where more pressure is put through the front of the foot.

What are the indications for surgery?

In most cases, this procedure will be recommended for patients who have significant pain, which has not responded to stretching exercises and other non-operative treatments.

What does the procedure involve?

The goal of the procedure, which is often called a gastrocnemius release or recession, is to lengthen the calf muscle to reduce the muscle tension in the calf, Achilles tendon and plantar fascia.

The operation can be performed under either local or general anaesthesia. A small incision is made on the back of the calf just below the knee or mid-calf region depending on the severity of the calf tightness. The fascia covering of the muscle is released and this allows the calf muscle to lengthen.

For certain conditions, gastrocnemius recession is recommended in conjunction with a larger surgical procedure, for example tight calf muscles can be a part of some flatfoot deformity correction procedures or as part of an ankle replacement operation.

Gastrocnemius surgery is usually done as a day-case, meaning the patient can go home a few hours after the surgery.

What can I expect after the surgery?

Patients may walk immediately after the surgery when it is done in isolation (ie not as part of a larger operation).

Some patients may need crutches for a few days and a walking boot for two to three weeks. A splint may be worn whilst sleeping for up to six weeks after surgery to keep the calf muscle stretched.

In most cases, the calf muscle will feel stretched or tight for just a few weeks. The stretching that begins shortly after surgery may be uncomfortable. Discomfort can be managed with over-the-counter pain medication.

Are there any risks of surgery?

There are two small nerves that sit along the gastrocnemius muscle and may be stretched during the procedure. When you stretch the muscle, occasionally the nerves are stretched as well. This can cause a passing sensation of numbness or tingling.

Based on studies, this complication occurs in about 5% of cases and usually resolves within six to eight weeks. There is a much smaller risk of permanent nerve damage, infection, bleeding and blood clots (deep vein thrombosis).

What can I do after surgery?

Physiotherapy

You should restart stretching exercises seven days after the surgery. This is an essential part of your recovery in order to obtain maximum benefit.

Driving

You should inform your insurance company of your operation. It is advisable to avoid driving for the first 2 weeks after the operation or until you can perform an emergency stop without restriction. If you have an automatic car and have had left leg surgery you may return to driving sooner.

Work

Most people can return to work one to two weeks after surgery. If you have a physically demanding job, you may need longer before returning to work.

Sport

It is advisable to avoid strenuous exercise, including swimming, until you are reviewed by your consultant after your operation.

