When is it Time to Think About Surgery?

A gastrocnemius slide surgery is indicated for patients who have a contracture (tightness) in their outer calf muscle (the gastrocnemius), and have failed non-operative management. Often a regular calf stretching program and use of orthotic devices in your shoes can lead to successful non-operative management of symptoms. However, in some instances surgical treatment is indicated. Gastrocnemius contracture results in the inability to bring the ankle joint past a neutral position (right angle to the lower leg) with the knee straight. Rather than “walk on their toes” most people naturally and unconsciously “compensate” by having more motion through the joints in front of the ankle. This midfoot compensation often leads to increased repetitive pressure to various structures in the foot during standing and walking. Therefore, the presence of a contracture may lead to painful conditions of the foot.

About the Surgery

The outpatient procedure takes approximately one hour and is performed under general anesthesia. A small incision (approximately 1/2 inch) is made on the inside area of the lower leg and the gastrocnemius tendon is exposed. Several tiny rows of incisions or a single incision is made across the tendon to allow it to stretch and lengthen. Patients will now have the same ankle motion with their knee straight that they previously had with their knee bent. The skin incision is sutured closed and a dressing is applied.

Preparing for Surgery

Lab work and EKG may be scheduled prior to surgery. You are encouraged to stop smoking before surgery to prevent lung complications or delayed healing. Please bring your surgical boot to surgery. Anti-inflammatory medications, aspirin and blood-thinning medications should be stopped one week before your surgery unless otherwise specified by your family doctor. These medications affect your blood clotting ability and could increase your risk for bleeding.

What to Expect After Surgery

Please wear the surgical boot when you walk until you are seen for your first post-op appointment. The boot may be removed for hygiene purposes only for the first two weeks. The dressing over the incision may be removed after 48 hours and you may shower. Do not submerge your leg in water until the incision is healed and free of any scabs. Do not apply any lotions or antibiotic ointments to the incision. Keep the incision covered with clean dry gauze until you are seen in your doctor's office 3 weeks after surgery. Your sutures will be removed at that appointment. You must wear your boot while sleeping for the first two weeks after surgery.
Complications and Risks of Surgery

Blood clots: Symptoms of a blood clot include pain, swelling or redness of your calf or thigh. Call the office immediately if you develop any of these symptoms or go to the Emergency Room. If you develop sudden shortness of breath go to the nearest Emergency Room or call 911. Walk every hour during the daytime. Patients who are immobile for prolonged periods of time are at a higher risk of blood clots.

Infection: Infection is rare but can occur following surgery. You are at a higher risk for infection if you have diabetes, rheumatoid arthritis, chronic liver or kidney disease or if you are taking steroids. Symptoms include: fever or chills, drainage, redness, foul smell or increased pain at the incision sites. Call the office immediately if any of these symptoms occur.

Anesthesia complications: Respiratory failure, shock, cardiac arrest, and death are always possible during surgery. Patients with long-term kidney, heart, liver, or lung disease are at a higher risk. Nausea and vomiting from the anesthesia can be common. Coughing, deep breathing exercises, and drinking plenty of fluids will help to flush out the anesthesia gases.

Nerve damage: The sural nerve runs along the top of the muscle being lengthened (the gastrocnemius). Although uncommon, injury or irritation of the sural nerve may lead to pain and/or numbness around the outside of the foot. Notify your surgeon if numbness or tingling is prolonged or worsens after surgery.

Tethering of the skin: The skin incision may adhere to the tissue overlying the calf muscle. This can cause tethering of the skin when the calf muscle moves. Your doctor may instruct you in deep massage to this area to break up these adhesions.

Calf weakness: Some initial calf weakness occurs in all patients. This weakness typically resolves within 6-9 months of surgery.

Recovery Period

The average recovery period is approximately 6 weeks. Patients may be allowed to return to a sedentary job within a few days after surgery. Patients with labor intensive jobs that require prolonged standing or squating/kneeling or stair/ladder climbing may not be able to return to work for approximately 8 weeks or may return sooner with restrictions on these types of activities. You may not drive for 3 weeks if your surgery was on the right side.