## What to Expect from a Procedure to Lengthen Your Child's Calf Muscle

#### WHY SHOULD MY CHILD HAVE SURGERY TO LENGTHEN A CALF MUSCLE?

Calf muscles that are short or "tight" can make walking, moving, standing or sitting uncomfortable for your child. It might cause your child to walk on their toes and make wearing shoes or braces painful.

A calf muscle lengthening surgery can

- Improve walking ability
- · Help their posture or body alignment
- Reduce pain

#### ABOUT CALF MUSCLE LENGTHENING SURGERY

During the operation, the surgeon makes a single small incision to lengthen the tight muscle, tendon or tissue to allow more movement in the lower leg.

After the surgery, a cast is placed on your child's foot and lower leg to protect the surgery site and allow the leg to heal.

Calf muscle lengthening is an outpatient surgery. Most children go home on the day of surgery and are able to put some weight on the leg receiving the surgery.

#### RECOVERING AT HOME

Generally, your child will be able to put weight on their feet as tolerated while wearing a leg cast. Your care team will prepare you for daily activities. This includes instructions for bathing, dressing and getting around safely with a leg cast.

Follow the surgeon's instructions for limiting your child's activity while they are healing. Make sure to avoid overstretching or high-impact activities, like running or jumping, during the healing process.

Your child may have leg pain or be uncomfortable in the first few weeks after surgery. It is common to have spasms or jerky movements as the leg heals.

# Your child will wear a cast for 3 to 6 weeks after surgery.

The amount of

muscle released

is personalized for each child by

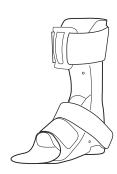
their surgeon.

#### **FOLLOW-UP APPOINTMENTS**

Your child's leg cast will be removed at a clinic visit a few weeks after surgery. Calf lengthening surgery and the treatment after surgery is personalized for each child. Your orthopedic surgeon will work with you and your child to develop a treatment plan based on your child's healing progress.

A custom ankle-foot brace, called an orthotic, will be fit to your child at the first or second clinic visit after surgery. If needed, a new cast will be placed on your child until the ankle-foot brace is ready.

It is important that your child wear the new brace according to instructions from their surgeon. This brace helps to support and correctly position the foot and ankle after surgery. Most children wear the ankle-foot brace for about a year.



An ankle-foot brace will be specially made for your child.



## Guidance for Your Therapist and Care Providers: Post-Op

GASTROCNEMIUS RECESSION

#### Immediate Post-Op through end of Week 6

#### **RESTRICTIONS AND IMMOBILIZATION**

- Short leg cast weight bearing as tolerated for 6 weeks
- Knee immobilizer when resting during the day and at night for 6 weeks
- Use of knee immobilizers post-operatively is based on surgeon's discretion
- · Avoid impact activities (running, jumping, skipping, hopping)
- Avoid activities that would cause cast to become wet or submerged in water

### THERAPY FOCUS (Instruction provided by inpatient PT prior to hospital discharge – No outpatient PT for 2 weeks after surgery)

- Safe mobility with or without assistive device
- Focus on strengthening all LE muscles except ankle dorsiflexors, plantarflexors and foot intrinsics
- Home exercise program provided by PT for LE strengthening (except muscles noted above)

#### **CRITERIA TO PROGRESS**

- Clearance from surgical team to initiate Outpatient PT after 2 week follow up with ortho
- · Proper fit of solid AFO once cast is discontinued

#### Week 6 to Completion of PT Care

#### RESTRICTIONS AND IMMOBILIZATION

- Weight bearing as tolerated with AFO until cleared by surgical team
- Can remove AFO for PT non-weight bearing exercises at 6 weeks
- · If doing well, can initiate WB without AFO in PT and for household distances at 3 months
- Continue AFO for long distances for 4-6 months
- Ok to hinge AFO at 5 months
- Continue AFO at night for 12 months
- Continue knee immobilizers at night for 6 months

#### THERAPY FOCUS

- Surgical scar mobility to begin once good wound closure has occurred (~4-6 weeks)
- · Active ankle range of motion in all planes
- Lower extremity strengthening with specific attention to ankle dorsiflexion, ankle plantarflexion (concentric and eccentric), inversion and eversion
- Safe to add resistance training after 12 weeks and when patient demonstrates full active range of motion in all planes
- · Gait training with AFO until cleared by doctor
- Global focus on heel-toe or foot flat gait without compensations (i.e., knee flexion or recurvatum)
- · If patient is struggling to meet gait-related goals, consider referral to Lokomat program
- · Home exercise program to focus on strengthening and maintaining range of motion in all planes
- Anticipate full return to baseline function at ~ 3-6 months post-op (with AFO) / 12 months (without AFO)

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