

Macroductyly

What Is Macroductyly?

Macroductyly is a rare condition in which an infant's fingers or toes are abnormally large because of overgrowth of bone and soft tissue. Babies are born with this condition.

Usually macroductyly occurs in one hand or one foot, but multiple fingers or toes on that hand or foot are affected. Macroductyly of the finger is more common than macroductyly of the foot.



There are two types:

Static macroductyly

Static macroductyly occurs when the affected fingers or toes are roughly one-and-a-half times the size of normal fingers and toes. They grow at the same rate as the unaffected fingers or toes.

Progressive macroductyly

Progressive macroductyly occurs when the affected fingers or toes begin at a regular size. Then, as a child becomes older, the affected fingers or toes grow much larger, at a much faster rate, than the unaffected fingers and toes do.

What Causes Macroductyly?

The cause of macroductyly is unknown. Some believe an abnormal nerve or blood supply in the affected fingers or toes causes the condition. The condition isn't inherited and isn't caused by anything the mother did during pregnancy. Macroductyly is associated, however, with other conditions, such as [vascular malformations](#) and neurofibromatosis.

Macroductyly Symptoms and Effects

The main symptom of macrodactyly is having one or more fingers or toes that are much larger than the others. Macrodactyly is usually a benign condition, but it can result in foot or hand deformities—often affecting appearance and function.

Macrodactyly Diagnosis and Treatment

Macrodactyly is usually visible at birth, unless it is the progressive type, which might not be detected until later in early childhood, when fingers or toes start getting larger.

To confirm the type of macrodactyly and determine which tissues are affected, your child might have tests such as [X-rays](#) or [MRI](#).

The orthopedists at Gillette Children’s Specialty Healthcare specialize in typical and atypical growth and development—and have in-depth knowledge of rare and complex conditions like macrodactyly.

The goal of treatment is to help the affected fingers or toes work as well as possible. Sometimes, in mild cases, only observation or a modified shoe is needed.

In most cases, macrodactyly is corrected with surgery. Often, the surgery is complex, involving multiple procedures and long-term planning.

Your child’s customized treatment plan might include:

Soft Tissue Debulking

Removes the thickened layers of skin and fat to reduce the width of the fingers or toes. Then, replaces the affected skin with grafts of healthy skin from another area of the body. Your child might have soft tissue debulking done in multiple stages, with each procedure taking place about three months apart.

Shortening Procedures

Corrects length by slowing the growth areas of the bone or removing bones in a finger or toe.

Ray Resection

In severe cases—especially cases of progressive macrodactyly—your child might need a ray resection. This typically involves complete removal of the affected fingers or toes.

Integrated Care

When you come to Gillette, your child will receive care in a family-centered environment, designed to help your child achieve their highest possible levels of independence, comfort and happiness.

Gillette offers fellowship-trained orthopedic surgeons who specialize in caring for children, along with a vast team of

collaborative experts in a variety of specialties. You'll get help understanding which specialty areas might be best for your child—for macrodactyly treatment, your family might work with experts in:

- [Orthotics, Prosthetics and Seating.](#)
- [Child life.](#)
- Nursing.
- [Occupational therapy.](#)
- [Orthopedics.](#)
- [Physical therapy.](#)
- [Radiology and imaging.](#)
- [Rehabilitation medicine.](#)
- [Social work.](#)
- [Therapeutic recreation.](#)

[Make An Appointment](#) [651-290-8707](#) [Refer a Patient](#) [651-325-2200](#)

This information is for educational purposes only. It is not intended to replace the advice of your health care providers. If you have any questions, talk with your doctor or others on your health care team.

If you are a Gillette patient with urgent questions or concerns, please contact Telehealth Nursing at [651-229-3890](#).