developmental trigger thumb

what is a trigger thumb?

It is a pediatric condition that causes abnormal bending (flexion) at the thumb. The flexor tendon of the thumb becomes thickened, resulting in decreased tendon gliding within the sheath (A1 pulley) of the thumb. This causes the tendon to stick or the thumb to stay bent. It is fairly common; 3 out of 1,000 children are diagnosed by the age of 1 year. 25 percent of patients have both thumbs affected. This is different than the acquired adult condition of trigger finger.



symptoms

Trigger thumb usually begins with occasional "triggering" and progresses to fixed flexion of the thumb. It is rare that it is caused by an injury. It is usually painless and does not limit the majority your child's daily activities. You may be able to feel a bump at the base of the thumb.

diagnosing and treating a trigger thumb

Your provider can usually tell from examining your child's thumb whether it is trigger thumb or other condition without needing imaging studies, such as an X-ray. Your child's treatment will depend on age and severity. Spontaneous resolution (where it fixes itself) is unlikely after 2 years of age.

nonsurgical treatment

If your child is less than 2 years of age, extension exercises and observation may be suggested as the first line of treatment. Splinting of the thumb may also be recommended with the exercises. Splinting hyperextends the thumb and may be used for 6-12 weeks. 30 to 60 percent of trigger thumbs will resolve spontaneously before the age of 1. Less than 10 percent will resolve spontaneously after 1 year of age. Exercises and splinting are not recommend for fixed deformities in older children.

surgery

If the trigger thumb does not resolve on its own, your provider may recommend surgery. A small incision is made on the thumb. The nerves and important structures of the thumb are protected. The sheath is then dissected to release the flexor tendon. This allows the finger to bend and straighten normally again. Surgery takes about 20 minutes.



surgery (continued)

Your child can usually go home the same day, and his/her hand will be wrapped in a soft bandage or sometimes a small cast. The stitches will be dissolvable. Your provider will discuss the risks and possible complications of surgery with you.

using the thumb again

The goal of treatment is to allow your child to straighten the thumb again without sticking. This is important for growth and development of the thumb. If it spontaneously resolves or requires surgical treatment, the long term complications are very rare and your child is usually back to normal activities very soon after treatment and require no long term follow up.