

Congenital Trigger Thumb

OVERVIEW

Your child has been diagnosed with a congenital trigger thumb. The problem is that the tendon which bends the thumb is locked or triggering in the tendon sheath and prevents the thumb from fully extending. This condition has been referred to as congenital trigger thumb, although it usually presents after infancy. Children with trigger thumb rarely complain of pain. Family will often recognize limited motion and initiate evaluation. Sometimes, motion will improve with stretching. If it does not improve, treatment is a small surgical procedure to release the band that blocks tendon motion.



BACKGROUND

Trigger digits are uncommon in children. Older adults tend to get trigger digits commonly affecting the middle and ring fingers. In adults, the tendon will get stuck and often release with a popping or trigger sensation. In children, the thumb is more commonly affected. Trigger thumb in children is usually a fixed block to extension due to a mismatch between the size of the flexor tendon and the tendon sheath. The tendon sheath is reinforced by annular bands that work to keep the tendon in place. The tendon gets blocked if the tendon sheath is too small for the tendon to glide through. Sometimes children will have both thumbs affected.



DIAGNOSIS

Examination reveals limited motion in the thumb. Usually, the thumb will not full extend, but will flex well. Flexing the wrist will some times allow more extension in the thumb. Often there is a nodule in the palm that moves with flexion and extension of the finger. This is called a "Notta node". No imaging or laboratory studies are needed to make the diagnosis of trigger thumb.

TREATMENT

Treatment can be postponed until after age 4, as spontaneous regression probably occurs in about 30% of cases. Some will improve with gentle stretching or bracing to help the tendon fit through the sheath. After age 4, surgical correction is the best

approach to treatment and generally results in normal thumb function. Conservative treatment is not appropriate for older children who present with a locked digit that cannot be passively extended. Surgery is straightforward and involves release of the tight area in the tendon which is called the "A1 pulley". This is done with careful protection of the digital nerves.

EXPECTED OUTCOMES

With careful surgical technique, the incidence of complications should be low. The most common complication after surgery is recurrence. This can be minimized by splinting the thumb in extension for 1-2 weeks after the release. There are risks with surgery including for injury to the adjacent digital nerves. Infections and painful scars are uncommon if the incision is protected and kept clean.

MORE INFORMATION

Further information can be obtained on the internet. Your local public library can help you explore these sources if you are interested. Two good sites for expert and peer reviewed information are the American Academy of Orthopedic Surgeons at www.aaos.org and the Pediatric Orthopedic Society of North America at www.orthokids.org.