OVERVIEW
Your child has been diagnosed with a 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. They usually are brought in for evaluation when the parent first notices a flexed posture of the thumb. If the joint is locked, treatment is a simple surgical procedure to release the band that blocks tendon motion.

BACKGROUND
Trigger digits are uncommon in children. Adults tend to get trigger digits far more often, especially women. In adults, it commonly affects the thumb, long finger, and ring finger. In children, the thumb is almost exclusively involved. Trigger thumb occurs for unknown reasons, but clearly there is a mismatch between the size of the flexor tendon and the tendon sheath. The main flexor muscle of the thumb is the flexor pollicis longus that inserts onto the base of the distal phalanx. The fibro-osseous tendon sheath is reinforced by annular bands that work to keep the tendon in place. The tendon has become locked within the tendon sheath. Sometimes children will have both thumbs affected.

DIAGNOSIS
Examination reveals limited motion in the thumb. Usually, the thumb will not fully extend. Flexing the wrist will sometimes 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 1, as spontaneous regression probably occurs in about 30% of cases. After that age, surgical correction is the best approach to treatment and almost always results in normal thumb function. Conservative treatment is not appropriate for older children who present with a locked digit that cannot be
passively extended. A thumb fixed in flexion requires surgical correction. 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 reported after surgery is damage to digital nerve. Adhesions and subsequent stiffness may develop with excessive handling of the tendon or prolonged postoperative mobilization. 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 www.emedicine.com.

FEEDBACK
If you have questions or comments, please contact the office or submit them to the web site at www.pedortho.com.