

# Trigger Finger



Trigger finger or stenosing teno-synovitis is a condition which may occur either in the early years (in which case its cause is congenital) or in the mid to later years of life (in which case its cause is degenerative).

Normally, tendons run inside a tendon sheath, which has a number of thickenings along its course which act as pulleys. The tendon is incredibly smooth and the gliding motion up and down the tendon sheath is [beautiful] and frictionless.

Occasionally, however, either a lump develops in the tendon, or a tightening of the one of the pulleys occurs, and the tendon gets irritated against the pulley of the tendon sheath. Almost always, the first annular pulley (which is found at the distal crease in the palm, under the little, ring and middle fingers, and under the proximal crease of the palm, of the index finger and thumb) becomes involved in the process.

Their resultant effect is that pain is experienced in the hand, and clicking may be felt, and the finger might be bent at the proximal interphalangeal joint, or in the case of the thumb, the interphalangeal joint and in the worst cases the finger may either be permanently stuck or have to be pulled straight with the other hand, in order to fully extend the digit or thumb.

As alluded to above, the cause falls into two broad categories; The congenital form is usually noticed within the first year of life, and is due to a lump in the tendon, and this almost exclusively involves the thumb, but really may involve other digits. The degenerative form may be part of another degenerative process such as rheumatoid arthritis or some other connective tissue disease, or may simply occur for no particular reason. Commonly, the ring finger is involved, but any of the digits may be involved with this process. Non-operative treatment involves injecting steroids such as Kenacort a-40, into the region of the A-1 pulley;. In a significant percentage of people, this treatment modality is successful. The needle itself is not overly painful, but does cause aching in the hand, which may be particularly severe on the first night of treatment. This subsequently settles down and after about a two week period, the effect of the injection is felt and triggering may resolve either partially or completely.

For those cases where steroid injection does not work, operative treatment is indicated. This involves making a skin crease incision, blunt dissection down to the A-1 pulley preserving the neurovascular bundles on either side of the tendon sheath, and retracting them out of the way. The A-1 pulley is then divided with a scalpel and the incision may be extended with a pair of scissors, once all the appropriate structures have been identified.

The wound is closed with a fine Prolene suture and adhesive dressings placed over the suture line and a light dressing is applied for a short

period of time. Patients are encouraged to start using the hand the following day after surgery, although it is inadvisable to do heavy manual labour for at least a week after surgery, as this may result in wound infection and/or wound breakdown.

The potential risks and complications of surgery, include damage to the neurovascular bundles, infection, bleeding, wound break-down, scar problems. Any hand surgery can precipitate regional pain syndrome, and this procedure is no exception. Complications following the surgery are rare, and in most instances the condition is treated quickly and efficiently, as a simple operation that can be performed

in a Day Case facility. The procedure can be done under local anaesthetic, but it is more comfortable for all involved to have a quick anaesthetic.

The treatment is usually instantaneous and permanent, however, if an infection develops as a result of surgery, this may lead to recurrent triggering at a later date.

Please note: Trigger finger release may be contra-indicated in rheumatoid arthritis as release of the pulley may affect the biomechanics of the hand and result in worsening hand deformity, secondary to the destructive forces at play in this disease process.



JOHN  
CROCK

MB,BS(Melb), Dip Anat, MD, FRACS

## Plastic and Reconstructive Surgery

Contact (03) 9899 6144

Fax (03) 9899 6188

Email [info@johncrock.com](mailto:info@johncrock.com)

[www.johncrock.com](http://www.johncrock.com)