## TRIGGER FINGER

The **flexor tendons** that bend the fingers and thumb run from the forearm. The tendons run within a tube called the **flexor sheath**. This has a complex system of thickenings called "annular" pulleys. There are five in the fingers (A1-A5) and three in the thumb (A1, oblique and A2). The whole system is mechanically very similar to bicycle brake cable.

The tendons are lined by a layer of tissue called the **tenosynovium**. This allows them to glide smoothly through the various pulleys. As we age, the tenosynovium degenerates and thickens, a condition called **tenosynovitis**. This in alone can make the fingers feel puffy, tender, "slow" and even stiff.

Trigger finger is caused by the thickening around and on the tendon, which causes it to catch as it runs in and out of the sheath. You can often feel this swelling in the palm as you move the finger. The condition can occur in any and sometimes multiple fingers. There are two ways of treating the problem.

Steroid injection A small amount of steroid is injected around the tendon. This flattens

out the swelling on the tendon allowing it to glide freely in and out of the sheath once more. A single injection is all that is needed in 50% of cases. A further 25% will respond to another injection (i.e. three-quarters of cases can be successfully treated in this way). The steroid injection does not work immediately. It causes no general side-effects but occasionally the skin around the injection-site can be made a little thinner. Therefore two injections are the maximum for the treatment of each "episode". Even after successful treatment, the triggering may return in the affected or other fingers. This is, however, very unusual if you have had surgery

**Surgery** This is needed if the steroid injections do not work. It involves a small procedure under local anaesthetic. A slit is made in the mouth of the

sheath to prevent the tendon catching at this point. Technically, this is achieved by the surgeon cutting the A1 pulley.

The operation is usually performed under local anaesthetic. The hand will be dressed with a supportive dressing that permits finger movement and light hand use. You will be discharged with specific instructions ("Hand Surgery") relating to hand exercises and wound care. Your stitches will be dissolving by about two weeks after your operation.

**Wound** Possible problems include swelling, bruising, bleeding, blood collection under the wound (haematoma), infection and splitting of the wound (dehiscence).

**Scar** You will have a scar on the palm, which will be firm to touch and tender for some months. This can be helped by firm massage with the moisturizing cream.

**Stiffness** Some patients can have finger stiffness before the operation due to poor tendon glide. Exercise is important to overcome both this and the effects of surgery.

**Nerve** The nerves running to the fingers can be damaged during the surgery and cause numbness in part of the finger. This complication is very rare but may require a further operation to correct.

**Regional pain syndrome** About 5% (1 in 20) of people are sensitive to hand surgery and their hand may become swollen, painful and stiff after the operation. This problem cannot be predicted, is variable in severity and is principally treated with physiotherapy.





