WHAT IS A GANGLION CYST?

A ganglion cyst is the most common lump that develops in the hand. Ganglion cysts are benign (harmless) lesions. A ganglion is a fluid-filled sac arising from an adjacent joint capsule or tendon sheath. A ganglion can form from almost any joint or tendon sheath in the wrist or hand. The following drawings describe the most common sites for presentation of a ganglion.

WHAT ARE THE CAUSES?

The exact cause of ganglion cysts remains uncertain. The most popular theory is that ganglion cysts form after trauma or degeneration of the tissue layer responsible for producing the synovial fluid which normally lubricates the joint or tendon sheath. The cyst arises from accumulation of this fluid outside the joint or tendon sheath in a sac or cyst.

Ganglion (or mucous) cysts of the distal interphalangeal joint of the finger (see over, on left) occur in people over 40 years of age and are associated with early underlying arthritis. Ganglia of the distal interphalangeal joint may put pressure on the nailbed and cause grooving of the nail (see over). Ganglion cysts of the tendon sheath of the fingers (see over, on right) tend to occur from teenage years to 40 years and respond well to aspiration, which ruptures the fluid sac.
HOW IS IT TREATED?
Ganglion cysts often change in size and may even disappear spontaneously. For this reason, if the ganglion is not symptomatic, it may be best to simply wait for a period of time. Painful wrist ganglia may respond to wrist bracing. Wrist ganglia may be aspirated using ultrasound to guide the radiologist, who also puts a small dose of steroid at the site of origin of the ganglion cyst. After this treatment a wrist brace is worn constantly for 4 weeks to prevent recurrence. The success of this technique is approximately 30% if aspirated once and 50% if aspirated twice.

Ganglion cysts of the tendon sheath of the fingers respond much better to aspiration with a cure rate of 50%.

IF SURGERY IS REQUIRED
The most reliable method of removal of ganglion cysts is surgery (90% cured), as a day patient. Ganglion cysts of the fingers can be removed under local anaesthetic but those of the wrist require general anaesthetic. The ganglion is removed with a small piece of the joint capsule or tendon sheath from which it has arisen to avoid recurrence. In the treatment of a mucous cyst of the distal interphalangeal joint, it is important to remove any osteophytes (bony spurs) that may be associated with the origin of this type of ganglion.

RECOVERY
Following ganglion cyst removal at the wrist, a bulky dressing including a lightweight fibreglass splint is worn for 10-14 days. Hand therapy is then started to get the wrist moving again. It will take usually take 2-3 months to regain normal strength and movement, both of which will improve gradually. Recovery is rapid for tendon sheath ganglion cysts (2-3 weeks) whereas distal interphalangeal ganglia take 6-8 weeks to recover due to the surgery to the joint bony spurs. Hand therapy is not usually required for finger ganglion cysts.