

## MUCOUS CYSTS (GANGLION)

One of the most common sites for a ganglion is the finger-tip where they often referred to as a mucous cyst. In the majority, there is clear connection between the cyst and the capsule of the distal interphalangeal joint (DIPJ). They are most common in women (M:F = 3:1). The cause is unknown but in 60-80% of cases, mucous cysts are associated with arthritis of the joint, which causes the formation of small bone-spurs.



At this site, they can cause three specific problems: -

**Skin thinning** - the skin over the cyst can become very thin exposing the cyst wall, which may rupture when knocked. Patients may experience repeated cycles of break-down followed by healing at 2-4 week intervals.

**Nail-fold disturbance** - The cyst can disturb the normal seal between skin and nail. The cyst can become exposed and/or dirt get into the space.

**Nail deformity** - Pressure on the nail growth centre ("germinal matrix"), will cause a groove. Episodes of rupture may cause ridging similar to the rings on a tree.

Many mucous cysts can be left alone if they are causing no pain or functional problem, as they are harmless. They can sometimes disappear by themselves. However, repeated episodes of rupture are at least inconvenient, often painful and may occasionally lead to significant infections.

A number of methods are used for treating ganglions including (i) **aspiration** by drawing the fluid off with a needle (high recurrence rate), (ii) **injection** after aspiration with substances such as steroids (unproven treatment with some side effects on skin) and (iii) **surgery**.

Surgery is performed under local anaesthetic (awake). It may involve several steps: (i) removal of the ganglion and its stalk, (ii) removal of bone spikes and (iii) reconstruction of areas of excessively thin skin. The latter may involve skin flap or skin-graft that can be advanced into or used to cover the area of loss.

The hand will be dressed with a supportive dressing that permits finger movement and light hand use. You will be discharged with specific instructions relating to hand exercises and wound care.

Complications are more common than perhaps might be expected after this seemingly trivial surgery due to the effects of these cysts on the skin and nail-fold and the existence of arthritis. I do not operate soon after rupture whilst the skin is unhealed due to extra risk of infection and the possibility that I will not be able to find the (now deflated) cyst. Surgery may be unavoidable when a cyst is permanently exposed but again I will cancel if the area is looking inflamed. Although cancelling surgery is annoying and inconvenient for you, it is best to avoid what can be very destructive infections involving the joint and soft tissues.

**Bleeding** This is usually minor but will often cause some staining of the dressing in the first few hours. Significant bleeding and/or blood collection under the wound (haematoma) is very rare.

**Infection** This is indicated by pain, throbbing, redness or other discolouration and discharge. Please seek advice promptly.

**Wound** The repairs can break-down causing splitting of the wound (dehiscence). This usually heals with dressings rather than needing further surgery.

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

**Nail** Grooving usually settles after the operation but occasionally it can persist after or result from the surgery due damage to the germinal matrix.

**Stiffness** This can occur if the hand is not used and exercised as recommended after the operation.

**Pain & swelling** Can persist after even successful surgery and be due to the underlying arthritis.

**Regional pain syndrome** About 5% (1 in 20) experience what can be generalised swelling, pain and stiffness in the hand after the operation. This problem cannot be predicted, is variable in severity and is principally treated with physiotherapy.

**Recurrence** Up to 10% (1 in 10) of ganglions return after being removed.

**Nerve** The area around the scar may end up feeling a little numb due to damage of tiny nerves.

**Tendon** The tendon that straightens the finger (extensor) is only rarely damage by surgery and would cause the finger to droop at the tip. The tendon can, however, be damaged by infection.