

Wrist ganglions

Information for patients

The purpose of this information leaflet is to tell you about wrist ganglion cysts.

These are the most common type of swelling in the wrist. Ganglions are completely harmless, do not indicate any serious underlying conditions, and usually disappear within a few years.

What is a ganglion?

A ganglion is a collection of thickened fluid which comes from a joint or near a tendon. They most commonly come from the wrist joint.



What causes a ganglion?

Joints are lined with a special tissue called synovium, which produces a lubricating fluid so that the joint can move freely without friction. A ganglion is formed if this fluid ‘leaks’ from the joint and the soft tissues react by forming a barrier to stop it spreading – this barrier is the wall of the ganglion. Ganglions can occur at the back or the front of the wrist. Most ganglion cysts arise from a point of relative weakness around a joint.

What are the symptoms?

Ganglions produce a swelling or lump, commonly seen at the wrist.

When small, this lump may only be seen when the wrist is bent, but the lump can be obvious, and occasionally the lump itself gets quite big.

Ganglions tend to increase and decrease in size with time, often getting bigger when the wrist is loaded. An increase in the pressure generated by the wrist joint can ‘push’ fluid out into the ganglion.

Pain is a common complaint in patients who come to see a specialist. This pain can be a result of the pressure within the ganglion or can represent some mild irritation of nearby skin nerves. Even if you get pain from a ganglion, it does not mean that any damage is being done, and it is very safe to use the hand normally even if the ganglion hurts.

How is the diagnosis made?

The diagnosis is usually straightforward as ganglion cysts tend to be smooth and round. They fluctuate in size and occur at well-known locations in the hand and wrist. The diagnosis is commonly made by your doctor or GP. If they are uncertain whether you have a ganglion cyst then a scan may be helpful.

At the wrist there are 2 main types of ganglion cysts:

Dorsal wrist ganglion cyst: This is a ganglion on the back of the wrist (the same side as your nails). They are more common in young adults and teenagers. They usually last up to two years before disappearing with no treatment. After surgery to remove the ganglion the risk of recurrence is around 25%. Surgery does not always improve the discomfort of the ganglion and can cause other problems such as increased pain, loss of wrist movement and painful trapping of nerve branches within the scar. Surgery for this type of ganglion is rarely recommended, because of poor satisfaction rates.

Volar wrist ganglion cyst: This is a ganglion on the front or palm side of the wrist. They can happen in young adults but are also seen in association with wrist arthritis in older individuals. Surgery is possible to remove the ganglion but the risk of recurrence after surgery is around 30%. Problems after surgery include persistent pain, loss of wrist movement and trapping of nerve branches within the scar. There is also a risk of damage to the blood vessel (artery) and to a small nerve that supplies sensation to the palm of the hand. For these reasons, many surgeons advise against an operation for these cysts. If you are considering surgery, you should also read the leaflet “Having an operation on your hand or arm” which outlines some of the risks.

What happens to ganglions over time?

The majority of ganglions will fluctuate in size over the course of weeks or months, but most will disappear within a few years. The ganglion is harmless, and it is very rare to have a significant problem from a ganglion. The strong medical recommendation is to leave the ganglion alone and not to worry about it.

Are there any other options?

For ganglion cysts in general, the possibilities for treatment are:

1. First line treatment

The cyst can often result in pain, but it is not harmful to continue to use your wrist normally. You may wish to adapt how you use your wrist e.g. not doing push-ups on a bent wrist etc. If the wrist is sore you can purchase a wrist splint online, or speak to your large local pharmacy. These are commonly Velcro splints with a metal bar on the palm side of the splint (known as futuro splints). You don't wear them all of the time, only when the pain is bad, or at night-time.

2. Removal of the liquid contents of the cyst with a needle (aspiration)

Aspiration can confirm the diagnosis when it is not clear. The ganglion fluid itself is thick and jelly-like and cannot be removed with a small needle.

A large needle inserted into the cyst to remove the fluid and allow the lump to go down. It will not disappear, and aspiration often does not cure the problem – it simply confirms the diagnosis and makes the lump smaller.

80 % (8 in 10) ganglions will come back over the course of days or weeks.

3. Surgical removal of the cyst

Surgery is not usually recommended. This is because a ganglion is a harmless and self-limiting condition. Surgery always carries a risk which can leave you worse off following operation than they were before.

Satisfaction rates a year after surgery are generally low.

Here are some things to consider before requesting surgery on a ganglion:

Benefits of surgery:

It can remove the lump.

Risks of surgery:

You essentially exchange a lump for a permanent scar. The scar can be long and can stretch, so it can end up being a wide scar, which is unsightly. The scar can be sensitive or numb.

There is a high chance that the ganglion will recur (20-30%) This is because we don't understand why they form in the first place, and so we can't stop them from reforming.

Surgery does not necessarily improve the symptoms you are complaining of. There is no guarantee of improving your pain with surgery.

Surgery can result in stiffness of your wrist. Scar tissue that forms after surgery can restrict the range of movement of the wrist permanently.

Other risks such as infection, bleeding or nerve damage are small. In volar wrist ganglion cysts there is a risk of damage to the artery at the wrist.

Stiffness of the fingers can occur after any surgery on the hand or wrist.

There is a very small risk of developing a pain syndrome (Complex Regional Pain Syndrome – CRPS) following any hand or wrist surgery. This is a condition that we don't really understand why it occurs. After surgery, we would normally expect your pain to settle as you heal. In a pain syndrome, you have normal healing, but the pain gets worse, can spread throughout the hand and wrist, and is associated with stiffness and swelling. Treatment of this condition is mainly with specialist hand therapy, lots of reassurance, and sometimes special pain relief. It may involve the Pain Team as well. This can be a devastating complication of surgery and can make you worse off compared to the original condition.

If you think about benefits and risks sitting on a weighing scale, many people find that the risks far outweigh the benefits of surgery and decide against it.



Alternatives to surgery

Leaving the cyst alone, ignoring it. Using simple pain relief, anti-inflammatory gels or splints to manage the pain.

Removing fluid from the cyst with a needle (aspiration). Please see above.

What if I do nothing?

The cyst is likely to disappear over time.

It is harmless, doesn't indicate any serious conditions and usually settles down.

Other resources

Lothian Virtual Hand Clinic – Ganglion cyst

<https://lothianvirtualhandclinic.co.uk/ganglion-cysts/>



BSSH – Ganglion cysts information

www.bssh.ac.uk/patients/conditions/20/ganglion_cysts



NHS Inform – Ganglion cysts

www.nhsinform.scot/illnesses-and-conditions/muscle-bone-and-joints/arm-shoulder-and-hand-problems-and-conditions/ganglion-cyst/



Lothian Virtual Hand Clinic – having an operation on your hand or arm

<https://lothianvirtualhandclinic.co.uk/having-an-operation-on-your-hand-or-arm/>

