

GANGLION CYSTS

Ganglion is a Greek word that means "a knot of tissue." Basically, a ganglion cyst is a bump or mass that forms under the skin. They can occur at any joint or tendon sheath, but most often they appear on the back of the wrist or on the fingers.

Ganglion cysts are probably the most common lumps that occur in the hand. Sometimes they are also called synovial hernias or synovial cysts because of their relationship to the synovial cavities in the joint. But more about this in a moment.

Most often, ganglion cysts occur in the 25 - 45 year old age group, and they're more common in women than they are in men.

To understand them better, it might help to know a bit more about the joints themselves first.

Joints are the places in the body where bones meet, allowing us to move in a variety of ways. The wrist joint is where both forearm bones (the ulna and the radius) meet the carpal bones, the bones that make up the back of our hands.

But joints are more than just bones. They also contain a space or a cavity, called the synovial cavity. The cavity is covered with a thin membrane called the synovial membrane and in the cavity is a thick fluid similar to the white of an uncooked egg. It helps protect and pad the bones.

This synovial fluid is also found in the covering of the tendons, those cords that connect the muscles to the bones.

The ganglion cyst forms when tissues around the joint become inflamed and swells with fluid. As this happens, the balloon-like ganglion grows in the connective tissue of the joint or even in the membrane that covers the nearby tendon.

At first, when you feel them, they feel soft and moveable. This is because they're filled with a jelly-like fluid. And, in some cases, they do seem to grow, especially when the surrounding tissue is irritated, but they are not real tumors and they are not cancerous. In fact, in almost 30% of all cases, the cysts eventually disappear by themselves.

While some cysts cause no pain, many do, especially when they first appear or when the hand or wrist are used often. The tenderness may eventually restrict the range of movements.

Causes of Ganglion Cysts

There is no specific cause of cysts, but several factors seem to play a role in their formation.

One explanation is that they occur where there is a weak place in a joint capsule. This weakened place then puffs out, but has only a one-way valve that lets fluid into it but not out of it. This could explain why the cyst can become bigger and bigger over time.

Another explanation deals with injuries to or conditions of the wrist, such as sprains or arthritis. These can weaken the covering of the joint or the tendon - enough so that a small perforation can occur. As this happens, a piece of thin membrane that lies under it, called a synovium, can break through it. Then, each time the joint is used, the action pushes a little more synovial fluid into the sac, making it grow larger and harder and create the cyst.

But it seems that occupational factors might also play a role. In fact, even leisure activities can play a role. Wrist ganglions frequently occur in bowlers, tennis players, and handball, racquetball and squash players.

Because ganglion cysts are not dangerous, it is most often the patient who determines what is to be done with them.

Symptoms of Ganglion Cysts

Patients often find the ganglion cyst to be displeasing to the eye, but most of the time, the cysts allow the hand to function normally. Thus, many patients do not seek medical attention. Sometimes, however, ganglions may limit motion in the joints or produce pain in the surrounding soft tissue. Ganglion cysts on the finger may produce deformities of the fingernail. Cysts arising from the patient's palm may cause pain when a patient grasps something. Patients may also report a pattern of the cyst breaking open, draining a clear liquid, and then forming again. On rare occasions, ganglion cysts (particularly those associated with the wrist) may cause changes in the bone.

The pain associated with ganglion cysts is often described as aching and is aggravated the more your hand or wrist flexes. Sufferers can also feel a tingling sensation that shoots into the hand or forearm.

Treatments for Ganglion Cysts

Fortunately, medicine has come a long way over the years. Not that long ago, the acceptable treatment was to pick up a large book and bring it down with a good force, right onto the ganglion. The idea behind that was to rupture the thing and get the liquid out. But, as more and more people tried that - and had wrist damage because of it - physicians learned to discourage that practice to their our patients.

Many sufferers choose the wait-and-see approach as their first option. In this case, the patient may find it helpful to take a nonsteroidal anti-inflammatory medication like ibuprofen or naprosyn for the times when there is pain. Sometimes, wrapping the wrist or wearing a splint, which applies a bit of pressure, can also alleviate the pain. Ice can help too. Using an ice pack for 20 to 30 minutes three or four times a day can help reduce the inflammation and ease the discomfort.

But, if those steps don't work, or if the cyst begins to interfere with daily life, aspiration or surgery might be called for.

Aspiration is easy. It just means drawing the fluid out of the sac. It's something that's done in the doctor's office and it only involves using a local anesthetic. The doctor will inject a local anesthetic to the area using a very thin needle. This will numb the ganglion and the surrounding tissue. Then, a needle will be inserted into the ganglion, and the fluid will be taken out, in quite the same way as sipping on a straw works.

Aspiration works in that the fluid is removed which diminishes the bump. But, since ganglions cysts are firmly attached to the joint or tendon covering from which they stem, aspiration doesn't really remove them. It does take the fluid out, but quite likely, since the root of the cyst remains in the joint, over time, the fluid will find its way back up through that connection and the cyst will reoccur.

If after trying these non-surgical treatments, the cyst is still bothersome or cosmetically displeasing, surgery to remove the cyst may be recommended.

Surgery for Ganglion Cysts

Surgery is most often performed on an outpatient basis. It can be under either a regional or general anesthesia depending on the type of cyst. Usually, if it's located on the finger, a regional anesthetic is enough. This will numb the arm and hand. But, often for those cysts located on the wrist, a general anesthetic is more appropriate.

The surgery takes about 30 minutes. The orthopedic surgeon simply cuts the ganglion out - making sure that the source, or root, of the cyst is removed as well. This may require removing a piece of the joint capsule or tendon sheath next to the ganglion, depending on where the exact source comes from.

After the cyst and its root are removed, the incision will be closed with either stitches or steri-strips. Then, a bulky compression dressing will be applied. This bandages the wound and applies a bit of pressure to minimize bleeding. If the ganglion was on the wrist, you may also need to wear a splint after the surgery.

If stitches are used, make sure to find out when you need to return to get them removed. And, if steri-strips were used to hold the skin together, ask for a few extra before leaving the hospital so you can replace them if they come off.

As with any surgery, you might feel some tenderness and discomfort at the site, and you might notice some swelling. But this goes away quickly and as soon as your comfort level permits, you can return to full activity. The bandage can be taken off after about 48 hours, but you'll probably still need the splint for a week or two.

If the incision bleeds during the first 24 hours after surgery, apply pressure to it with a clean tissue or cloth for 10 minutes. This should be enough to stop the bleeding. If the incision causes pain, try a warm compress or a heating pad. Even right after surgery, you can shower and bathe, but make sure you carefully dry the incision afterwards and apply a new bandage to it during the first two or three days. If the bandage gets wet, change it right away to keep the wound as dry as possible.

If you notice increased pain, swelling, redness, drainage or bleeding in the surgical area, call your doctor.

While surgery offers the best success in removing ganglions, in a few cases, about 5% to 10%, they may return. Patients may resume normal activities as soon as it is comfortable to do so--usually by two weeks for ganglions of the finger and by six to eight weeks for ganglions involving the wrist.

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