

Ganglion Cyst of the Wrist and Hand

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Ganglion cysts are the most common mass or lump in the hand. They are not cancerous and, in most cases, are harmless. They occur in various locations, but most frequently develop on the back of the wrist.

These fluid-filled cysts can quickly appear, disappear, and change size. Many ganglion cysts do not require treatment. However, if the cyst is painful, interferes with function, or has an unacceptable appearance, there are several treatment options available.

Description

A ganglion rises out of a joint, like a balloon on a stalk. It grows out of the tissues surrounding a joint, such as ligaments, tendon sheaths, and joint linings. Inside the balloon is a thick, slippery fluid, similar to the fluid that lubricates your joints.

Ganglion cysts can develop in several of the joints in the hand and wrist, including both the top and underside of the wrist, as well as the end joint of a finger, and at the base of a finger. They vary in size, and in many cases, grow larger with increased wrist activity. With rest, the lump typically becomes smaller.

Cause

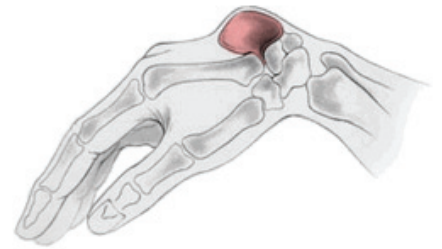
It is not known what triggers the formation of a ganglion. They are most common in younger people between the ages of 15 and 40 years, and women are more likely to be affected than men. These cysts are also common among gymnasts, who repeatedly apply stress to the wrist.

Ganglion cysts that develop at the end joint of a finger – also known as mucous cysts – are typically associated with arthritis in the finger joint, and are more common in women between the ages of 40 and 70 years.

Symptoms

Most ganglions form a visible lump, however, smaller ganglions can remain hidden under the skin (occult ganglions). Although many ganglions produce no other symptoms, if a cyst puts pressure on the nerves that pass through the joint, it can cause pain, tingling, and muscle weakness.

Large cysts, even if they are not painful, can cause concerns about appearance.



The most common location of a ganglion cyst is on the back of the wrist.



A mucous cyst at the end of the index finger.

Doctor Examination

Medical History and Physical Examination

During the initial appointment, your doctor will discuss your medical history and symptoms. He or she may ask you how long you have had the ganglion, whether it changes in size, and whether it is painful.

Pressure may be applied to identify any tenderness. Because a ganglion is filled with fluid, it is translucent. Your doctor may shine a penlight up to the cyst to see whether light shines through.

Imaging Tests

X-rays. These tests create clear pictures of dense structures, like bone. Although x-rays will not show a ganglion cyst, they can be used to rule out other conditions, such as arthritis or a bone tumor.

Magnetic resonance imaging (MRI) scans or ultrasounds. These imaging tests can better show soft tissues like a ganglion. Sometimes, an MRI or ultrasound is needed to find an occult ganglion that is not visible, or to distinguish the cyst from other tumors.

Treatment

Nonsurgical Treatment

Initial treatment of a ganglion cyst is not surgical.

- **Observation.** Because the ganglion is not cancerous and may disappear in time, if you do not have symptoms, your doctor may recommend just waiting and watching to make sure that no unusual changes occur.
- **Immobilization.** Activity often causes the ganglion to increase in size and also increases pressure on nerves, causing pain. A wrist brace or splint may relieve symptoms and cause the ganglion to decrease in size. As pain decreases, your doctor may prescribe exercises to strengthen the wrist and improve range of motion.
- **Aspiration.** If the ganglion causes a great deal of pain or severely limits activities, the fluid may be drained from it.

This procedure is called an aspiration.

The area around the ganglion cyst is numbed and the cyst is punctured with a needle so that the fluid can be withdrawn.



During an aspiration procedure, the fluid is drained from the ganglion cyst.

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Aspiration frequently fails to eliminate the ganglion because the “root” or connection to the joint or tendon sheath is not removed. A ganglion can be like a weed which will grow back if the root is not removed. In many cases, the ganglion cyst returns after an aspiration procedure.

Aspiration procedures are most frequently recommended for ganglions located on the top of the wrist.

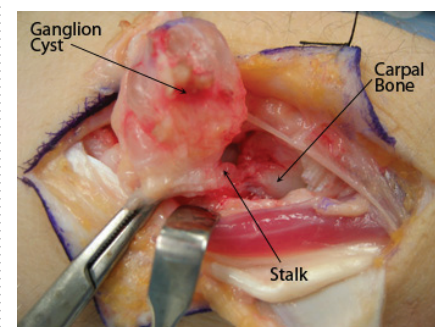
Surgical Treatment

Your doctor may recommend surgery if your symptoms are not relieved by nonsurgical methods, or if the ganglion returns after aspiration. The procedure to remove a ganglion cyst is called an excision.

Surgery involves removing the cyst as well as part of the involved joint capsule or tendon sheath, which is considered the root of the ganglion. Even after excision, there is a small chance the ganglion will return.

Excision is typically an outpatient procedure and patients are able to go home after a period of observation in the recovery area. There may be some tenderness, discomfort, and swelling after surgery. Normal activities usually may be resumed 2 to 6 weeks after surgery.

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A ganglion cyst at the wrist is removed during a surgical procedure called excision.