

Helping Hand[™]

Health Education for Patients and Families

Ganglion Cysts

A ganglion (gang-glee-uhn) cyst is a fluid-filled lump under the skin. It is often found over a joint or in a tendon in the hand or wrist (Picture 1). A ganglion cyst forms when there is a small tear in the sleeve of thin tissue that covers a joint or tendon. The tissue bulges and forms a sac. Fluid from the joint leaks into the sac and causes swelling.

- The name of the ganglion cyst changes with its place on the body. If it appears on top of the wrist, it's a dorsal wrist ganglion cyst (Picture 1). A cyst on the palm side of the wrist is a volar wrist ganglion cyst. Ganglion cysts are most often seen in these two areas. If it's in the hand, it's called a retinacular cyst.
- Children of all ages can get ganglion cysts. They are typically seen in people between the ages of 15 and 40, but they can be seen in very young children as well.





- Girls are more likely than boys to have ganglion cysts.
- While ganglion cysts are common, they are usually harmless.

Cause

- The cause of ganglion cysts is unknown. They can appear suddenly or slowly and may go away on their own. If they go away, they may come back for no reason.
- Exercise or using the joint where the ganglion cyst has formed more often may cause it ٠ to get bigger over time. Resting the joint may help it get smaller.

Signs and Symptoms

Ganglion cysts don't usually hurt, but there are some symptoms your child may notice.

- Appearance of a lump
- Pressure or pain when bending the joint if a cyst is big
- Discomfort, tingling, or numbress if the cyst is pressing on a nerve
- Pain is not usually intense if there's pain at all
- Skin over the cyst may feel smooth, round, and rubbery
- Less range of motion where the cyst is or less strength to grip things

Diagnosis

A ganglion cyst can often be diagnosed during a clinic visit. The doctor or health care provider will take your child's medical history and do a physical exam.

- Special testing is not needed unless your child has a lot of pain where the cyst is.
- Sometimes an X-ray, ultrasound, or magnetic resonance imaging (MRI) test may be ordered. X-rays will **not** show a ganglion cyst, but they may show other problems. An MRI can find hidden cysts under the skin or reveal other causes of your child's pain.

Treatment

Most ganglion cysts go away without treatment. However, some may come back after treatment. It may take a long time, up to 12 to 18 months, before the cyst goes away. If it's not causing any pain, the doctor or health care provider may suggest simply watching and waiting.

If the ganglion cyst is causing your child many problems, the doctor or health care provider will discuss doing one of the following:

• **Splinting:** A brace is used to keep the area with the cyst from moving. That will help prevent more irritation that's caused when the joint moves. It may help the swelling go down and your child may be more comfortable.

- Aspiration: The fluid is drained from the ganglion cyst by using a needle (Picture 2). A doctor will numb the area, then insert a needle into the cyst to remove the fluid. The cyst may fill with fluid again since it wasn't fully removed. This procedure is done in the outpatient clinic.
 - Aspiration is not recommended for volar wrist cysts. There is too much of a risk for damage to blood vessels in this area.
- **Surgical excision:** Your child will be put to sleep with anesthesia. This will keep them



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Picture 2 Needle aspiration

from feeling pain during surgery. A surgeon will cut out (excise) the whole ganglion cyst. This includes the thin sleeve covering the tendon or joint. Excision greatly reduces the chance of the cyst coming back, but it can still return.

- Patients wear a splint for 2 weeks after surgery.
- Surgery is a safe choice, but the recovery time is longer and there are risks like:
 - Infection
 Bleeding at the surgical site
 - Scarring Recurrence (return of the cyst)
 - o Pain o Possible harm to t
 - Problems with healing
- Possible harm to the blood vessels, nerves, and tissues around the surgical site
- Volar wrist ganglion cysts are harder to remove. Your child may feel pain at the incision site for a longer period of time.
- The surgery is done in an outpatient surgery center. Your child will go home the same day. Full recovery takes 2 to 6 weeks.

Hand specialists in Plastic Surgery and in Orthopedic Surgery at Nationwide Children's Hospital take care of many patients with ganglion cysts. They are here to help you and your child.

Nationwide Children's Columbus	Nationwide Children's Toledo
Call (614) 722-HAND (4263) to schedule an appointment	Call (419) 251-2061 to schedule an appointment