Ganglion Cysts

A ganglion (GANG glee on) 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). The ganglion cyst forms when there is a small tear (herniation) in the sleeve of thin tissue covering 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 is 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 locations.

Children of all ages can get ganglion cysts. Although they are typically seen in people between the ages of 15 and 40, 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 (benign).

Cause

The cause of ganglion cysts is unknown. They can appear suddenly or slowly, and can disappear on their own. They can also reappear for no reason. Exercise or increased use of the joint where the ganglion cyst has formed may cause it to grow larger over time. Resting the joint may help it get smaller.

Signs and Symptoms

Ganglion cysts usually are not painful. If they grow large, your child may feel pressure or pain when bending the joint. If the cyst presses on a nerve, it may cause discomfort, tingling and numbness. Your child may have less range of motion in the area or less strength to grip things. Pain, if present, is usually not very intense.

The appearance of the lump may be the only thing that brings the child in for evaluation. The skin over the top of a ganglion cyst may feel smooth, round and rubbery.
Diagnosis

A diagnosis of ganglion cyst can often be made during the clinic visit. The doctor or health care provider will take your child’s medical history and do a physical exam. No special testing is needed unless the child has a lot of pain. Sometimes an X-ray or magnetic resonance imaging (MRI) test will 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 and some re-appear despite treatment. It may take a long time, up to 12 to 18 months, before it disappears. If it is not causing any pain, the health provider may recommend simply watching and waiting.

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

- Splinting. The area affected by the ganglion cyst is immobilized. A brace or splint will prevent further irritation caused when the joint moves. It will 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). The doctor first numbs the area. Then a needle is inserted into the cyst and all of the fluid is emptied. Because the entire cyst is not removed, more than 80% of the time the cyst will fill with fluid again. This procedure is done in the outpatient clinic.

Aspiration is not recommended on volar wrist cysts. There is too great a risk for damage to blood vessels and nerves in this area.

- Surgical excision. Your child will receive anesthesia so that no pain is felt during the surgery. A surgeon will cut out (excise) the entire ganglion cyst including the thin sleeve covering the tendon or joint. Excision greatly reduces the chance of the cyst coming back. Still, about 5 per cent of them will regrow. Patients wear a splint for 2 weeks after surgery.

While surgery is considered a safe choice, it carries risks and a longer recovery. There is a chance of more bleeding at the surgical site, healing problems, harm to blood vessels, nerves and tissues in the area, infection, scarring and pain.

Continued on page 3
Treatment, continued

Volar wrist ganglion cysts are more difficult to remove. Your child may feel pain at the incision site for a longer period of time.

The surgery is done in the outpatient surgery center. Your child will go home the same day. Full recovery takes two to six weeks.

Hand specialists in Plastic Surgery and in Orthopedic Surgery at Nationwide Children’s Hospital take care of many patients with ganglion cysts. We are here to help you and your child. Please call (614) 722-HAND to schedule an appointment.