



## GANGLION CYST FAQ

### **1) What is a ganglion cyst?**

A ganglion cyst is the most common soft tissue mass of the hand and wrist. The cyst is a collection of fluid that is gelatinous in nature. The fluid filled sac may arise from a joint or tendon sheath. These cysts can be very small or enlarge to become unsightly. They are not cancerous and may arise as a single cyst or have multiple lobes. Some cysts feel quite hard and may be mistaken for a bony prominence. Ganglion cysts can occur in a variety of locations but they most commonly arise from the back of the wrist. Other locations the cysts are found include the front of the wrist, in the palm at the base of the finger or just behind the fingernail.

### **2) How is it caused?**

The exact cause of a ganglion cyst is not known. It may be related to trauma such as a fall on an outstretched hand although often patients have no prior history of injury. The cyst may also be due to degeneration of the adjacent tissue lining a joint or tendon sheath. It is believed that there is a one-way valve that allows fluid into the cyst but not back into a joint or tendon sheath. Cysts at the base of the fingernail are associated with degenerative arthritis of the tip joint of the finger, the distal interphalangeal joint.

### **3) What are the symptoms?**

Ganglion cysts are usually painless although they may cause localized discomfort. Mechanical symptoms such as limited joint motion are dependent upon size and location. Cysts in the palm at the base of the finger may cause discomfort with grasping activities. Cysts at the base of the fingernail may cause a nail deformity such as ridging. The natural history of

these cysts is variable. They may remain stable, increase in size or resolve over time.

#### **4) How does the doctor know that I have a ganglion cyst?**

A physician should evaluate any mass that is persistent. Often a ganglion cyst can be diagnosed after the patient describes their symptoms to the physician and the cyst is examined. The location and shape of the cyst is typical. The cyst will not be attached to the skin but will be adherent to the joint capsule or tendon sheath. On occasion the mass may be large enough that light can be shown through the cyst called transillumination. Other disorders such as synovitis, a bony prominence as in carpometacarpal bossing or other tumors must be ruled out. X-rays of a ganglion cyst are typically normal except for cysts at the base of the fingernail, which are often associated with degenerative arthritis and a bone spur. An ultra sound or MRI can be used to help confirm the diagnosis. Aspirating the gelatinous material consistent with a ganglion cyst is diagnostic.

#### **5) How is it Treated?**

The old wives tale that the cyst is burst by hitting it with a bible is not performed. The cyst is observed when it is small and causes no significant discomfort. Splints and pain medication may be helpful in limiting symptoms. An aspiration, which involves pulling the fluid out of the cyst with a needle, can be diagnostic and therapeutic. Approximately 50 percent of cysts will not recur after aspiration. The diagnosis is confirmed if the typical gelatinous material is obtained. Cysts on the palm side of the wrist are less amenable to aspiration due to the proximity of the radial artery.

#### **6) Is Surgery needed?**

If the cyst is painful or the size of the prominence is bothersome removal of the cyst can be considered. The procedure is performed as an outpatient under local, regional or general anesthesia dependant upon the size and location of the cyst. In general, surgery involves removing the cyst and a small piece of the joint capsule or tendon sheath. Cysts at the base of the fingernail have the associated bony prominence removed in

addition. A splint may be used for a short period of time for comfort followed by an exercise program.

**7) What are the risks the surgery?**

The cyst may recur in approximately 10 percent of cases despite surgical excision. In addition surgical treatment may result in joint stiffness which under scores the importance of the exercise program after surgery. The cyst on the palm side of the wrist is adjacent to the radial artery that is at risk. The risk of an infection postoperatively is low.