

# **Ganglions**

## **Patient information**

### **What are they?**

In the hand or foot, a ganglion is a particular type of lump, which shows up over or next to a joint or a tendon. Inside, it is like a balloon filled with a thick liquid. It may be soft or hard, may or may not be painful, may interfere with movement and may get bigger or smaller on its own.

The most common sites on the hand are the back of the wrist and the back of the finger. It is possible for ganglions to occur in the foot and ankle area.

Most ganglions do not pose a serious health risk, and can be simply left alone. Many ganglions go away with no active treatment.

### **What causes them?**

Normally, joints and tendons are lubricated by a special liquid that is sealed in a small compartment. Sometimes, because of arthritis, an injury, or just for no good reason, a leak occurs from the compartment. Now, the liquid is thick, like honey, and if the hole is small, it can be like having a pinhole in a tube of toothpaste - when you squeeze the tube, even though the hole is small and the toothpaste is thick, it will leak out - and once it is out, there is no way it can go back in on its own. It works almost like a one-way valve, and fills up a little balloon next to the area of the leak. When we use our hands for normal activities, our joints squeeze and create a tremendous pressure in the lubricating compartment - this can pump up a balloon leak with so much pressure that it feels as hard as a bone.

The lubricating liquid has special proteins dissolved in it that make it thick and also make it hard for the body to absorb it when it has leaked out. The body tries to absorb the liquid, but may only be able to draw out the water, making it even thicker. Usually, by the time the lump is big enough to see, the liquid can have got to be as thick as jelly.

### **What can be done?**

Some people, following non-medical advice, will smash the lump with a heavy book (an old wives remedy), and rupture the cyst. Sometimes this works, but

this is not a recommended way of treating it. The lump can come back even if it has been successfully treated this way.

### **What can a doctor do to help?**

Confirm that this actually is the problem.

Burst and drain the cyst with a needle and possibly inject the area with cortisone.

Perform surgery to remove the cyst and clean out the area where the cyst comes from.

### **Risks of surgery**

Scar

Bruising and swelling around the site of the ganglion that can last for weeks sometime months.

Wound infection

Stiffness especially when the ganglion comes from a joint.

Recurrence.

Nerve and blood vessel damage.

Distorted nail growth especially if the ganglion is very close to the nail bed

### **How successful is treatment?**

It depends on several things.

Tendon sheath cysts are more likely to be cured with a cortisone injection than cysts coming from joints.

Cysts coming from joints are less likely to come back after surgery if the joint itself is "cleaned out", but cleaning the joint out increases the chance that the joint will be somewhat stiff after surgery.

Cysts on the front of the wrist (volar wrist ganglions) are more likely to come back after surgery than cysts on the back of the wrist (dorsal wrist ganglions).

### **All ganglions can return even when surgery is performed!**

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