

# Ganglion Cysts

Ganglions can occur anywhere in the body where synovial fluid is found. Synovial fluid usually lubricates joints and tendons and looks very similar to KY Jelly. The synovial fluid is incredibly slippery, smooth and crystal clear. It would appear that some sort of irritation in either the joint or tendon sheath, which normally contains the synovial fluid, produces an abnormal response of the tissues. In the case of the tendon sheath, often a small split develops (probably a result of degeneration) and the synovial fluid appears to be pumped out into the tissues, where it is contained by a sac of normal tissues. In the case of joints, it comes out of an area of joint irritation, usually in association with some arthritis, and again produces a sac filled with the jelly-like substance. Occasionally however, the ganglions arising from joints, particularly on the back of hands, may look more fatty in appearance, and this represents mucoid degeneration of the synovial fluid. Occasionally ganglions, particularly arising from the flexor tendon sheath in hands, may burst when they are traumatized and this may result in their complete resolution. More of than not, however, they recur and subsequent surgical removal is rendered more complicated.



The surgical treatment involves dissecting out the sac and removing the underlying cause of the ganglion. Some years ago, it was 'in vogue' to excise a window of tendon sheath, and reconstruct this in ganglions that were arising from tendons. However, it is now considered satisfactory simply to excise the ganglion with a window of tendon sheath and not perform a tendon sheath reconstruction. Ganglions arising from the joint should be treated by not only excising the ganglion, but also by debriding the joint, as this is the root cause of the problem, even if the ganglion appears to be quite a way from the joint (they may have a stalk extending back into the joint cavity). Ganglions arising from the distal interphalangeal joints of the fingers commonly extend forward onto the nail bed and produce a nail-bed deformity. If left untreated, these do become quite large and burst, and then produce a communication between the outside skin and the joint. This may lead to septic arthritis, which in the worst case may lead to the loss of part or the entire finger.

Ganglions of the wrist joint can sometimes be treated endoscopically, which reduces the impact of the surgery on postoperative recovery, and greatly reduces the scarring caused by the procedure.

The surgical treatment of ganglions is usually very successful, with a low recurrence rate. In this practice, a recurrent rate of far less than 10% is reported, however, in some literature reports recurrence rates are much higher than this. The complications of treating ganglions depend on the site where the ganglion has come from. Any surgery can be complicated by infection, haematoma formation, flap necrosis, scarring or regional pain syndrome. Infection around joints can produce septic arthritis, which may lead to severe arthritis of the joint that requires fusion, after the infection has been adequately treated. Removal of a ganglion from the tendon sheath requires intricate separation of the neurovascular bundles from the growth and as such, the nerves may be damaged during surgery. All surgery carries the risk of unexpected events, but the chance of these being of any significance are probably less than the risk of having a major car accident or being struck by lightning!



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