

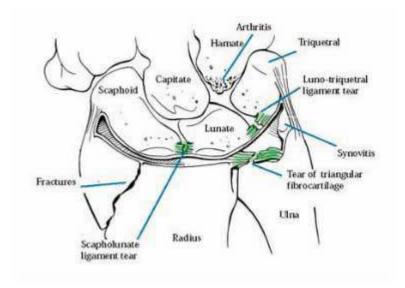
# **Arthroscopy - Wrist**

Richard A. Bernstein, M.D.

Wrist arthroscopy is an outpatient surgical procedure used to diagnose and treat problems inside the wrist. I will make small three or four incisions, usually less than a half - inch long, and insert an instrument called an **arthroscope**, which is smaller than the diameter of a pencil. The arthroscope contains a small lens, a miniature camera and a lighting system, enabling me to look directly inside the joint. Tiny probes, forceps, knives and shavers can then be inserted into the wrist and may be able to be used to correct some problems. I also have some nifty instruments for suturing inside the joint!

### Wrist anatomy

The wrist is a complex joint, with eight small bones and many connecting ligaments. Arthroscopy enables me to see the anatomic parts more easily than with an open incision. I can see the movement of the bones, test the tightness of the ligaments, look for cartilage damage, and make a more accurate diagnosis than I can from MRI o r other imaging modalities (x - ray, arthrogram).



# **Diagnostic Arthroscopy**

Diagnostic arthroscopy may be used if the cause of your wrist pain cannot be identified or if wrist pain continues for several months despite nonsurgical treatment. Before surgery, I will perform:



- A physical examination that focuses on your hand and wrist.
- Provocative tests that involve moving your hand in ways that reproduce the pain.
- Differential Lidocaine injections, to help localize the source of the pain.
- Imaging studies, such as X-rays of your hand and wrist.

Arthroscopic exploratory surgery may be used to confirm my diagnosis of a ligament tear or a triangular fibrocartilage (TFCC) tear. Ligaments are fibrous bands of connective tissue that link bones, helping to control the motion of our joints and providing stability and support. The TFCC is a fibrocartilaginous cushioning structure within the wrist, made of material very much like the meniscus of the knee. Most people have heard of "torn cartilage in the knee"; this usually refers to the meniscus. The meniscus is a piece of fibrocartilage that cushions the thigh bone from the leg bone. The TFCC similarly cushions the wrist especially along its outside portion. A fall on an outstretched hand can tear ligaments, the TFCC or both, resulting in pain with movement or a clicking sensation. In some cases, after the diagnosis is made, the condition can be treated arthroscopically as well.

#### **Arthroscopic Surgical Treatment**

Arthroscopy of the wrist is generally considered the "gold standard" to diagnose wrist conditions. Though physical exam, regular X - rays and certain more sophisticated X - rays can be useful, many times these tests are not definitive and surgical examination via arthroscopy is helpful for an accurate diagnosis.

Several conditions can be treated using arthroscopic surgery, including tears in the ligaments or the triangular fibrocartilage complex, synovitis (inflammation) and cysts. Often, there may be areas of inflammation, cartilage damage, or other findings after a wrist injury.

During arthroscopic surgery, I can trim or repair the tears. Wrist arthroscopy may also be used to smooth the bone surface s and remove inflamed tissue. Based on the findings at the time of arthroscopy, the post-operative regimen can change. Generally speaking, debridement or cleaning up tears allows an earlier restoration of motion. If the ligament or cartilage (TFCC) requires repair, this generally requires immobilization in a cast and then a splint for a period of time, depending upon the specifics. The specifics we will discuss after surgery.

Arthroscopy and limited incision surgery is also available to treat fractures of the scaphoid bone of the wrist. Limited approaches to the scaphoid fracture can often times get you out of a cast sooner than you would otherwise.

# **Arthroscopic Surgery in General**

Usually, general anesthesia is used during arthroscopic surgery. After the surgery, the incisions are each closed with a small stitch and a dressing and splint is applied.



After surgery, you will need to keep your wrist elevated and keep your bandage clean and dry. You can ice your wrist to help keep swelling down. I will give yo u a prescription for specialized hand therapy. The hand therapist will teach you exercises to help maintain motion and rebuild your strength. Analgesic medications will help relieve any postoperative pain, which is usually mild.

### **Complications**

Complication s during or after arthroscopic wrist surgery are unusual, but may include infection, nerve injuries, excessive swelling or bleeding, scarring or tendon tearing. An experienced surgeon, particularly one who specializes in treating the hand, can reduce the likelihood of complications.

### **Summary**

Arthroscopic surgery is a valuable diagnostic and therapeutic (treatment) tool. It is minimally invasive, and patients generally experience fewer problems and a more rapid recovery than with open surgery. Because it is an outpatient procedure, most patients are home several hours after surgery.

Copyright © 2020, Connecticut Orthopaedics All rights reserved. Revised 12/21/10