

# SRO Hand Center News

The North Bay's premier resource for hand and upper extremity care

**SRO** Santa Rosa  
Orthopaedics  
Expertise. Care. Healing.



## Understanding Arthritis of the Wrist



**SRO's Hand Center**, led by Kai-Uwe Mazur, M.D. (left), and Dominic J. Mintalucci, M.D. (right), is the only solely focused hand and upper extremity practice in California north of San Francisco that consists of board certified orthopaedic surgeons who have completed ACGME accredited fellowship training in hand and upper extremity surgery.

The Hand Center affords each patient state-of-the-art medical care in a friendly and compassionate environment. Our team treatment model focuses on diagnostics and meticulous surgical details, in addition to carefully monitored post-surgical rehabilitation & recovery.

The Hand Center's surgeons, physician assistants and certified hand therapists consult together on cases to assure quality of care and deliver successful results for patients. This approach incorporates on-site diagnostic x-ray, MRI services as well as SRO's fully automated and HIPAA-compliant electronic records system that work to achieve the highest level of patient recovery.

To learn more visit our website at [srortho.com](http://srortho.com) or call 707-546-1922.

Pain and stiffness are common symptoms of arthritis, and when pain occurs in the wrist, simple daily activities can become almost impossible to accomplish.

Not everyone with arthritis experiences the same type of symptoms, and the severity can vary greatly from patient to patient.

For some, the symptoms are not constant—but may come and go, depending on the level of activity and other factors.

### Symptoms of arthritis usually include:

- Pain
- Swelling
- Reduced range of motion or stiffness
- Weakness in the joint

There are many types of arthritis that can affect the wrist, but most arthritis-related diseases are chronic. This means that they are long-lasting—even permanent—and can eventually cause serious joint damage.

The wrist is a complex joint and is actually made up of multiple small joints. When healthy, the bones glide easily over each other during movement, protected by smooth cartilage that coats the joint surfaces. Arthritis damages this cartilage.

Over time, arthritis causes a gradual loss of cartilage. Without a smooth joint surface, the bones rub against each other, leading to irreversible joint damage.

Although there is no cure for arthritis today, there are many treatment options available to help relieve symptoms. Some options may also slow the progression of joint damage.

With proper treatment, many people are able to manage their symptoms and stay active.

Nonsurgical treatment options may include:

- Activity modification.
- Medications.
- Exercise, physical therapy.
- Steroid Injections.

When symptoms are not adequately controlled by the above therapies, your doctor may prescribe additional medications designed to stop the immune system from attacking the joints.

### Surgical Treatment

If nonsurgical treatment does not relieve the pain and quality of life has been significantly affected by arthritis, surgery may be the best option.

The goal of surgery is to relieve pain while preserving or improving hand function. Typically, this is done by minimizing or eliminating bone-on-bone contact.

Fortunately, there are a number of procedures for arthritis of the wrist. Your doctor will talk know which procedure will work best for your unique case.



# Ulnar Tunnel Syndrome of the Wrist

Ulnar tunnel syndrome is a condition that affects the wrist. It happens when the ulnar nerve becomes compressed from the wrist into the hand. This condition results in weakness, tingling, numbness, or pain due to the nerve compression.

Common symptoms of ulnar tunnel syndrome affecting the hand, wrist and little finger can include:

- weakness
- numbness in the little and ring fingers
- tingling in little and ring finger
- pain
- inability to do daily tasks
- problems holding things
- hand and fingers contraction

## Cause

One of the most common causes of ulnar tunnel syndrome is a soft tissue tumor, usually a benign (noncancerous) cyst called a ganglion which originates from the wrist joint.

Additional causes are repetitive trauma or chronic pressure applied to the area of the hand. Chronic pressure can occur in the hand of a bicyclist against the handlebars.

## Symptoms

The degree of weakness and numbness depends on the location of the pressure point. Pain may or may not be present in all cases.

## Nonsurgical Treatment

Treatment depends on the exact cause of the nerve pressure. For example, if the pressure is caused by the way the wrist is positioned when typing, a change in wrist position or the addition of some padding may be recommended. In the case of a jackhammer operator, the person must eliminate the repetitive trauma by altering their technique, using protective padding or changing jobs. A cyclist may relieve chronic pressure by frequently changing hand position on the handlebars and/or by adding protective padding.

In many cases of ulnar tunnel syndrome,

anti-inflammatory medications, such as aspirin or ibuprofen, may alleviate symptoms. Short-term use of a wrist splint may also be helpful.

## Surgical Treatment

Most cases of ulnar tunnel syndrome are caused by a growth at the wrist. The growth must be removed surgically. An experienced hand surgeon can remove cysts, scar tissue, or other causes of compression on an outpatient basis.

Once the pressure point is removed, the feeling will return and the numbness and tingling will decrease. It usually takes several months for the nerve to re-grow and heal completely. Postoperative rehabilitation and exercises are also prescribed by the surgeon.

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## The incapacitated hand: Flexor Tendon Injuries

A deep cut on the palm side of the fingers, hand, wrist, or forearm can damage the flexor tendons (the tissues that help control movement in the hand). A flexor tendon injury can make it impossible to bend the fingers or thumb.

Because flexor tendons are very close to the surface of the skin, a deep cut can easily hit a flexor tendon and frequently, the tendon is often cut into two pieces.

Like a rubber band, tendons are under tension as they connect the muscle to the bone.

Because the nerves to the fingers are also very close to the tendons, a cut may damage them, as well. This will result in numbness on one or both sides of the finger. If blood vessels are also cut, the finger may have no blood supply. This requires immediate surgery.

In addition to cuts on the arm, hand, or fingers, certain sports activities can cause flexor tendon injuries. These injuries often occur in football, wrestling, and rugby. "Jersey finger" is one of the most common of these sports injuries.

It can happen when one player grabs another's jersey and a finger (usually the ring finger) gets caught and pulled. The tendon is pulled off the bone. In sports that require a lot of arm and hand strength, such as rock climbing, tendons and/or their sheaths can also be stretched or torn.

Certain health conditions (rheumatoid arthritis, for example) weaken the flexor tendons and make them more likely to tear. This can happen without warning or injury.

**Tendons cannot heal unless the ends are touching, which does not occur with a complete tear.**

In most cases, a cut or torn tendon must be repaired by an orthopaedic hand surgeon, and requires surgery.

Surgery is usually performed within 7 to 10 days after an injury. In general, the sooner surgery is performed, the better recovery will be.

Because tendons tear in different ways — such as straight across, at an angle, or pulled right off of the bone — there are many different methods to repair them. All the methods for repair, however, involve special sutures.

Surgery is usually performed on an outpatient basis and a special dressing and splint is required after the surgery.

Many doctors use a plastic splint to protect the repair where the fingers and wrist are placed in a bent position to keep tension off the repair.