

Wrist Pain Decoded

Your Definitive Guide to Improving
Hand Function by Manvir Purewal M.Sc PT



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EVERYTHING YOU NEED TO KNOW ABOUT YOUR WRIST PAIN

By: Your Physical Therapist

Source: Mayo Clinic

If you suffer from wrist pain, you are not alone. It is a common complaint. There are many types and causes for wrist pain, ranging from sudden onset (as in a fracture after a fall or trauma) or repetitive stress leading to arthritis or carpal tunnel.

If your pain is long-standing, diagnosing the exact cause can be difficult due to the fact that many factors can lead to wrist pain. The right diagnosis can help you get the proper treatment.

THE SYMPTOMS TELL THE STORY

The symptoms of wrist pain may vary, depending on its cause. For example, osteoarthritis pain is usually described as “dull pain”, almost like a toothache. Tendinitis may be a “sharp or stabbing” pain. If you have any tingling, or “ins-and-needles” type of sensation, it may be related to nerve pain, which is often present with carpal tunnel syndrome.

The exact location of your wrist pain, and the type of pain will help your doctor and physical therapist come to a precise diagnosis and come up with a plan for your treatment to help you on your road to recovery.

If you experience minor sprain and strains for the first time, the usual response is ice, rest, and over-the-counter pain medications (if you are not sure of which medicine to take, ask your doctor which one might work best for you). If the pain and swelling don't decrease in the first 2 days, or it becomes worse, you NEED to see the doctor, and may even be a candidate for physical therapy. Delays in getting the right treatment can lead to poor healing, decreased range of motion in the wrist, and continued weakness that inhibits daily activities. So remember, DON'T put off making an appointment with the doctor and/or physical therapist.

What Causes Wrist Pain?

Here's what your wrist is made of:

- ✔ Eight small bones, arranged in 2 rows between the bones of your forearm and the bones of your hand.
- ✔ Ligaments connect these bones together and hold them stable.
- ✔ Tendons attach muscles to bone.



As you can see, with all these moving parts, damage to any one part can cause pain and affect your ability to use your wrist and hand.

- ✔ **Sudden impacts.** Falls are the most common cause of injury, especially falling with your hand stretched out straight. This can cause sprains, strains and even fractures.
- ✔ **Repetitive stress.** Any activity that requires repetitive wrist motion – like hitting a tennis ball, golfing, or bowling, typing, or repetitive carrying of objects – can inflame the soft tissue in the wrist leading to a variety of different types of injury.

Arthritis

- ✔ **Osteoarthritis.** In general, osteoarthritis in the wrist is uncommon, usually occurring only in people who have injured that wrist in the past. Osteoarthritis is caused by wear and tear on the cartilage that cushions the ends of your bones. Pain that occurs at the base of the thumb may be caused by osteoarthritis.
- ✔ **Rheumatoid arthritis.** A disorder in which the body's immune system attacks its own tissues, rheumatoid arthritis is common in the wrist. If one wrist is affected, the other one usually is, too.

Other diseases and conditions

- ✔ **Carpal tunnel syndrome.** Carpal tunnel syndrome develops when there's increased pressure on the median nerve, which passes through the carpal tunnel, a passageway in the palm side of your wrist.
- ✔ **Kienbock's disease.** This disorder typically affects young adults and involves the progressive collapse of one of the small bones in the wrist. Kienbock's disease occurs when the blood supply to this bone is compromised.
- ✔ **Ganglion cysts.** These soft tissue cysts occur most often on the top of your wrist opposite your palm. Smaller ganglion cysts seem to cause more pain than do larger ones.

THE RISK FACTORS

Wrist pain can happen to anyone — whether you're very sedentary, very active or are somewhere in between. But certain factors can increase your risk.

Any activities from sports, to daily tasks can lead to wrist pain. These include baseball, basketball, football, gymnastics, golf, and tennis. Also, recreational activities such as playing the guitar or piano increase the risk of wrist injuries.

Age

Older adults are more likely to have osteoporosis, which makes bones brittle and more susceptible to fractures, than younger people are. They're also more likely to fall and to develop arthritis.

Repetitive work

Almost any activity that involves your hands and wrists – like knitting, cutting hair, or typing – if performed forcefully enough and often enough can lead to disabling wrist pain.

Pregnancy

It is not uncommon for women to develop carpal tunnel syndrome in the 2nd or 3rd trimesters of pregnancy. This is partly due to hormonal changes. Shifts in the balance of estrogen and progesterone leads to more fluid retention, which increases swelling in the carpal tunnel.

WHAT TO EXPECT WITH YOUR DOCTOR (AND/OR PHYSICAL THERAPIST)...

If you go to your family doctor, you may be referred to a rheumatologist or even an orthopedic surgeon.

The doctor will ask you a bunch of questions pertaining to your symptoms and current limitations. During the physical exam, your doctor may:

- ✔ Check your wrist for points of tenderness and swelling
- ✔ Ask you to move your wrist to see if your range of motion has been decreased
- ✔ Assess your grip strength and forearm strength

Treatment:

The treatment you get depends on the type, location and severity of your injury and symptoms. Medications, such as pain relievers and corticosteroids may be recommended. If there is excessive swelling in the wrist, your doctor may decide to give you a cortisone shot to help relieve the inflammation.

If you have sprained or strained your wrist, your doctor may advise you to wear a splint to protect the injured site while it heals. Splints are particularly helpful with overuse injuries caused by repetitive motions. Physical therapy is an important part of your treatment. Often times, the doctor will give you a prescription for physical therapy, to help decrease inflammation, reduce pain, and help restore strength and flexibility into the wrist.



In some cases, surgery may be necessary. Your doctor will be able to decide if surgery is the best option for you at this time.

THE FIRST THING TO DO

If this is the first time your wrist is hurting, or it seems to be a minor pain, you may want to try putting ice on it for 15-20 minutes, taking some over-the-counter pain medicine, and even an over-the-counter wrist brace to help putting more stress on the injured area. If your pain does NOT improve, or EVEN WORSENS, in the first 24-48 hours, you need to see the doctor.

If this has happened before and is a recurrence of the same problem, treat with 15-20 minutes of ice, take the same medicine you did before, and hold off on any painful activities and exercises you might be doing. If you had therapy before, call your therapist to see what therapeutic exercises might be good to resume (or hold off on). If the pain does NOT improve in the first 24-48 hours, call your doctor or physical therapist. You may either need to return to physical therapy, or another treatment may be recommended for you.



PREVENTION 101

You can't predict the future—so you can't stop the unforeseen events from happening. However, you can do these simple tips to reduce your risk of injury (or re-injury):

- ✔ **Build bone strength.** Get adequate amounts of calcium — at least 1,500 milligrams a day for adults — and vitamin D to help prevent fractures.
- ✔ **Prevent falls.** Falling forward onto an outstretched hand is the main cause of most wrist fractures or sprains. To help prevent falls, wear sensible shoes. Remove home hazards. Light up your living space. And install grab bars in your bathroom and handrails on your stairways, if necessary.
- ✔ **Use protective gear for athletic activities.** Wear wrist guards for high-risk activities, such as football, snowboarding and rollerblading.
- ✔ **Pay attention to ergonomics.** There are tons of devices out there that will help improve the ergonomic setup of your work/home office. Things like ergonomic keyboards can help take the stress off your wrists when you're typing.

So what's the ideal ergonomic setup?

Technology is everywhere and advances in technology can be seen almost every day. While the age of computers has made our life much easier in so many ways, it has also created an influx of new physical ailments. Overuse injuries (also called, musculoskeletal disorders and repetitive stress injuries) are becoming more common in those who are at the computer for hours on end.

In the world of computers, the ideal ergonomic setup has become essential to maintaining our health.

Ergonomics, simply put, is the science of fitting jobs to people. Too often we try to accommodate ourselves to a workstation rather than taking time to make it work for us. With the long hours that we now spend both working and entertaining ourselves at a computer, it has become imperative to the health of our body that we adjust our set-up to work for us rather than against us.

OFFICE ERGONOMICS

Reducing The Risk At Work

Many risk factors can lead to musculoskeletal disorders. Once we identify what they are, we can then reduce our risk of injury.

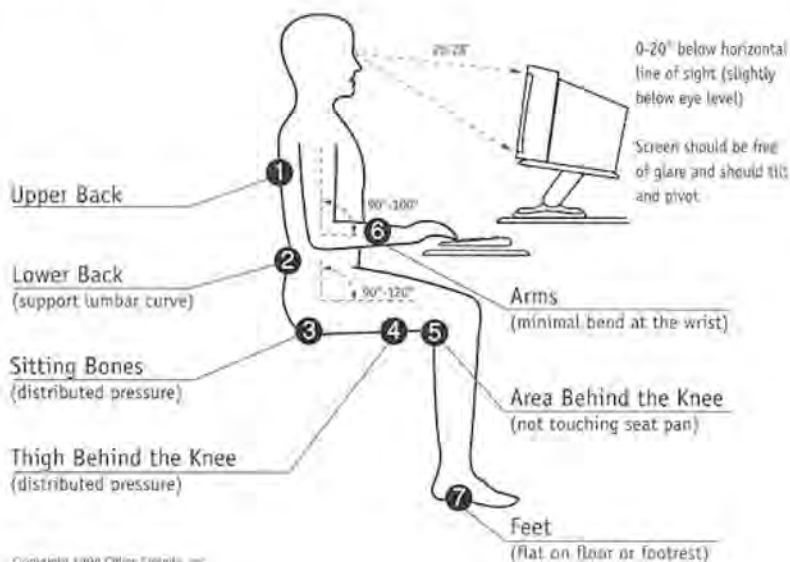
- 1. Repetition:** Constant typing throughout the day can stress the small muscles of your hand causing pain and weakness.
- 2. Awkward Postures:** Having a computer monitor that is too high, a keyboard that is too low, or a chair that is not adjusted properly places us in an awkward posture for hours throughout the day.
- 3. Force:** The constant clicking and dragging of the mouse or pounding of the keyboard places additional strain on the muscles of the hand and wrist.
- 4. Contact Stress:** The stress that we place on our wrists and forearm from resting them on the desk edge while we type or resting our elbows on the hard armrests of the chair can cause compression of nerves and tendons.

Now, let's talk ergonomics!

As you read below, take the time to think about your computer set-up and things that you can do to make it better fit your needs.



The Chair



Anyone who sits at a computer all day should have a fully adjustable ergonomic chair. Once you have found the perfect chair, figuring out the right adjustments can be tricky, but the tips below should help.

1. The Height

The height of your chair depends on the height of your keyboard. We will talk about that more in a minute. No matter how high your chair is, your feet should be placed on a flat, solid, surface. That means that if your chair is too high for your feet to reach the floor, then you need to have a footrest.

2. The Lumbar Support

Your lumbar region is made up of 5 weight bearing vertebrae in your lower back that take on stress throughout the day. Most chairs have a lumbar support that should fit nicely to the curve of your lower back. In a one-size-fits-all chair, the lumbar support does not seem to fit anyone. That is why an adjustable lumbar support is important. Make sure that the curve of the support fits nicely into the curve of your lower back. If your lumbar support is not adjustable, you can actually purchase lumbar supports that will attach to your chair or you might try placing a small pillow at the curve of your back.

3. The Seat

A good chair will have a seat that will adjust and tilt. You want to ensure that there is 2-3 inches between the front of your seat and the back of your knees. If the seat is too long for your legs, you will place constant pressure on the back of the knees which can cut off circulation to your legs. Most chairs either have a seat or a backrest that will slide back and forth. Both serve to accomplish the same goal. A seat that tilts is also of benefit because it allows you to change positions throughout the day.

4. Arm Rests

Your armrests should be positioned low enough that you can relax your shoulders. You should NOT use your arm rests while typing. They are for resting ONLY! Some people find that armrests get in the way of finding their most comfortable set-up and do away with them altogether.

The Monitor

The monitor should be placed between 18-30 inches away from the eyes to prevent any eye strain. Another good way to measure is to place the monitor an arm length away from you. Adjust the monitor so that the top of it is just below eye level. This will help (1) promote good posture for the neck so you don't have to tilt your head to see the screen, and (2) it helps keep the stress on the eyes at a minimal. Tilt your monitor up about 10-20 degrees for the optimal position.



Prevent Eyestrain

Just like our bodies become fatigued after doing something for a long time, so do our eyes. After every 20 minutes of looking at the monitor, give your eyes a break – look away at something 20 feet away for 20 seconds. Use overhead lights, but if those lights become too harsh, lamps make a good alternative. Decrease brightness on your computer screen. If you have a window close to your computer, position your monitor so that it is perpendicular to the window, rather than directly in front of it. This will also reduce glare.

The Keyboard and Mouse

The keyboard and mouse should be placed directly between you and the monitor. As you place your hands on the keyboard, your shoulders should be relaxed and your elbows bent to approximately 90 degrees. Your wrists should be straight and your fingers relaxed on the keys. If you have a keyboard tray, it should fit both the keyboard and the mouse so that you are not extending your arm up to the desk for mouse use. Ultimately, when the keyboard and mouse are positioned appropriately, they will almost be resting on your lap.

Wrist Rests

If you have wrist rests for your keyboard and/or mouse, they can be beneficial, but use them for resting only!

When typing, your wrists should be elevated off of the surface of the wrist rest. Only when you stop typing should you use the rest. If you use the wrist rest all day, you place constant force (contact stress) on the tendons and median nerve, which run through the wrist. This can actually lead to carpal tunnel syndrome (compression of the median nerve).



Other Handy Tips

- ✔ Be sure to place your most frequently used items within easy reach. This zone is about 16-18 inches in front of our body – the range you can easily reach into without having to lean forward or to the side. This may include things like:
 - > Telephone
 - > Stapler
 - > Calculator
 - > Special book or document
 - > Telephone
- ✔ Here's a good tip: If you're right-handed, place the phone on your left, and vice versa. This way if you need to take notes while on the phone, you can. If you use the phone constantly throughout the day, use a hands-free headset.
- ✔ **Use a document holder**, if you are referring to a document. This way you are not constantly looking down at a piece of paper.

THE IMPORTANCE OF REST

Take a break every 45-60 minutes. Get up and move around. Stretch!

If there are other tasks you can work on which are not on the computer (such as filing), do those every hour. Also be sure to include some daily stretches for your wrists and elbows to avoid getting stiff and decreasing the pressure that may arise from prolonged wrist activities like typing. Not sure what exercises/stretchers to perform? Ask your physical therapist to see what's right for you.

If you or anyone you know needs more information or is suffering from wrist pain, feel free to give us a call. We are here to serve you.

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We also offer the following services, some of which you will only find at our clinic!

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