



Craig Hospital

Redefining Possible for People with Spinal Cord and Brain Injuries

Provided as a courtesy of
Craig Hospital
3425 South Clarkson St.
Englewood, Colorado 80113

www.craighospital.org

For more information:

Craig Hospital Nurse Advice Line
1-800-247-0257

Upper Extremity Pain

For 20 years, Tom had “no aches, no pains, and no nothing.” Why was his luck changing now? Maybe his shoulder pain started because his new van didn’t have power steering, or maybe it was because he was doing a lot more wheeling on carpet. Regardless, now his shoulders hurt. Thinking that the pain might go away, he waited. But, after three or four months, the pain was so bad he couldn’t stand it anymore. A trip to the doctor left Tom with more information and some difficult choices.

Aging, Wear, Tear, & Overuse

Tom’s story isn’t really unusual; we all expect a few more aches and pains as we grow older. After all, aging and wear and tear go together. What’s different about Tom is that staying active after his spinal cord injury meant even *more* wear and tear on his arms and shoulders. Studies have shown that arm and shoulder pain is more frequent among SCI survivors than in the nondisabled population.

How Injuries Happen

Pain and injury from daily overuse is a frequent cause of upper extremity pain. Overuse, however, is different for each person. An activity that causes pain for one person may not for someone else. In general though, *the more frequently an activity is performed, and the more lifting or straining the activity requires, the greater the opportunity for injury and pain.*

Think about the number of times you transfer from your wheelchair everyday and then consider the extra shoulder strain when you transfer to and from surfaces *above* or *below* your wheelchair — maybe into a bathtub, or a tall pickup truck. The same transfers, day in and day out can cause a lot of strain on your shoulders and wrists.

The content in this document is intended for general informational purposes only and is not a substitute for professional medical advice or treatment for specific medical conditions. No professional relationship is implied or otherwise established by reading this document. You should not use this information to diagnose or treat a health problem or disease without consulting with a qualified healthcare provider. Many of the resources referenced are not affiliated with Craig Hospital. Craig Hospital assumes no liability for any third party material or for any action or inaction taken as a result of any content or any suggestions made in this document and should not be relied upon without independent investigation. The information on this page is a public service provided by Craig Hospital and in no way represents a recommendation or endorsement by Craig Hospital.

Overuse injuries can affect nearly any joint in the upper extremities, but most often affect the shoulders and wrists. Pain may be constant or may appear only during certain activities like wheeling long distances. Sometimes pain begins when daily overuse is combined with a specific injury like lifting something too heavy or too quickly. That “something” could be a grocery bag, a wheelchair, or your own body during a transfer.

Rotator Cuff Tears, Biceps Tendonitis & Carpal Tunnel Syndrome

Three frequent injuries among persons with spinal cord injuries are rotator cuff tears, biceps tendonitis, and carpal tunnel syndrome.

The *rotator cuff* is made up of four muscles and their tendons. These muscles support the shoulder and contribute to nearly all of its movements. Many factors, including both activity level and aging, can combine to increase pressure on these tendons and decrease their circulation. Eventually, a tear may occur — either partial or complete, depending on the amount of damage to the tendons and soft tissue. The most common symptom is pain or weakness when reaching above your head.

Biceps tendonitis is an inflammation of the biceps tendon and is often found in people who also have a rotator cuff tear. During normal arm movement the tendon of the biceps glides in a groove in the bone of your upper arm. Repetitive movements can cause swelling and pain in and around the tendon. Repeated use may even cause the tendon to fray. You usually feel pain near the middle of your shoulder in the front, or slightly lower on the outside of your arm. You might also have pain when you try to reach behind your back. Without treatment, you could lose some of your active shoulder movement.

Carpal tunnel syndrome occurs when a particular nerve is pinched as it passes through a narrow tunnel in your wrist. The usual symptom is pain or tingling in your thumb and first two fingers. It might awaken you from a sound sleep but then go away if you shake your hand. Bending your wrists tends to narrow the tunnel and increase the symptoms even more. And, as research already has shown, repetitive stress and strain on your bent wrist does greatly increase the risk of developing carpal tunnel syndrome. Unfortunately, SCI survivors do many daily activities with a bent wrist — transfers, weight shifts, wheeling, and using crutches are just a few examples.

Getting Help

Upper extremity pain can begin with many different injuries; often the symptoms of one are very similar to those of another. As you evaluate the type of pain that you’re having, ask yourself: what kind of pain is it – a sharp pain with certain movements, or a dull nagging pain? Where is it – all over or maybe one specific spot on your shoulder or your wrist? When does it hurt – all of the time or just certain times? How did it start – did it come on quickly or has it seemed to develop slowly?

Many people endure lots of pain before they seek treatment. But, ignoring pain probably won't make it go away, so don't put off talking with your doctor. In fact, ignoring pain frequently limits recovery and function. An accurate diagnosis, and the facts about different treatments will help you make wise choices.

Upper Extremity Pain

Be prepared to tell your doctor exactly what activities you do with your arms. Don't just tell him or her that you use your arms for transfers. Be ready to explain, or even demonstrate, how high, how far, and how often. Not only may your daily activities be causing your pain, but some of your doctor's recommendations will involve altering those same activities.

Treatment Choices

For most diagnoses, there probably will be more than one treatment option. What you choose will depend on what's causing your pain, and how that treatment will affect your daily activities and independence.

Most treatments begin conservatively. "Conservative" can mean changing or decreasing your current activities, buying new equipment, increasing the assistance you get from others, or resting your joints. You may need to use some imagination. What other ways can you get the same activities done? Can some of them be done by a family member? Can you hire an attendant or housekeeper for heavy work to give your shoulders a rest? How about equipment? Less expensive options may help too, like transfer boards, grab bars, a tub bench, or nocturnal splint. An occupational or physical therapist can help you evaluate these options and choose what you need.

Your doctor may recommend medication to decrease your pain or to reduce joint swelling. Medications can be effective, especially when combined with joint rest and the elimination of the pain-causing activities. Keep in mind, though: many pain medications cause constipation and can affect your bowel program. Ask about *other* side effects as well. And, make sure that your doctor knows all of the *other* medications you're taking.

For some people, surgery is the best, or only, option. But surgery – at least in the short term – can significantly *decrease* your independence. While you recover and the repaired area heals, you may need to rent a power wheelchair and arrange to have extra assistance. Make sure that you discuss the recovery period, in detail, with your doctor *before* surgery so that you make all the necessary arrangements.

Some Final Thoughts

Does the possibility of shoulder pain or injury later on mean that you should do as little as possible with your arms right now, that you should be protecting your arms at all costs? No, it's not that simple. A balance of exercise and movement is important to keep your joints healthy. But, the key word is balance. The choices you make today will impact the quality of your life as you get older. The bottom line is to pay attention and choose well.

This brochure was prepared with funding from the U.S. Department of Education's National Institute on Disability and Rehabilitation Research. The opinions contained in this publication are those of the grantee and do not necessarily reflect those of the US Department of Education.