

# SPRAINS, STRAINS, & PAINS

## OVERUSED AND ABUSED

An overuse injury, results from “repetitive subthreshold microtrauma” that results in injury to a muscle, tendon, or ligament. A slow process, these injuries usually result from poor form and/or not performing a balanced workout. Generally, they occur with veteran lifters who claim, But I've been doing it that way for a long time and nothing ever happened before. Sound familiar? Among the most frequent overuse injuries are:

**1. ROTATOR-CUFF IMPINGEMENT**, characterized by pain in or on the side of your shoulder, especially when you raise you arm above shoulder level. This is probably the injury our clinic see most often in weight trainers. When lifting, most people concentrate on the ‘mirror’ muscles, such as deltoids, triceps, biceps, and pectorals. The movements used to train these muscles often involve elevation and internal rotation of the shoulder joint. Thus, you can create an imbalance between them and the much smaller rotator-cuff muscles, which control depression and external rotation of the shoulder joint.



The imbalance changes your natural mechanics and can strain the unused muscles, which can cause tendonitis. If untreated, this can inhibit mobility of the shoulder joint, resulting in what's called an impingement.

Icing and stretching are important, too. The best stretch for rotator-cuff tendonitis involves lying on the affected side with your upper arm extended out at 90 degrees from your shoulder, in front of your body, and your forearm up in the air at 90 degrees from your upper arm. Lying on the side stabilizes the scapula. Place your chin directly into your upper arm so it can't rotate forward. Then, place your other hand on the affected forearm and try to gently pull it to the floor.

**2. PATELLAR TENDINITIS** is marked by pain in the bottom of the kneecap, where the tendon that connects to the shinbone begins. This can result from the going too heavy or starting with your knee bent too far back on leg extensions. The patellar tendon has to come up and around the kneecap. The patellar tendon has to come up and around the kneecap. If you begin leg extensions too far back, you can cause a strain. Limiting the range of motion for this exercise and the leg curl is one way to begin rehabilitation. You can also ice the area and increase your flexibility by stretching your hamstrings and quadriceps.

**3. LOW BACK PAIN.** With this kind of injury, you typically feel something odd happen in your low back, then it tightens up later. The next day you may have a hard time getting out of bed. If this has happened to you, you're not alone: Your discs, which sit between each vertebra in your spine, have a jellylike center and a fibrous border. Too much improper forward bending can gradually push the “jelly” out the back of the border, where it can impinge against nerves running down the spine.

Ice, rest, and better attention to squatting technique are among the remedies for low-back pain. Also, stretch your hamstrings, hip flexors, and low back. To stretch the hamstrings, stand and place one foot on a chair or bench, maintaining a slight bend in both knees. Keeping your back straight and head up, bend forward from the hips, trying to touch your chest to your thigh.

To stretch the lumbar area, lie on your back with your legs together and bent. Keeping your shoulders on the floor, slowly tilt your legs first to your left side, then to your right side.

**4. PEC MAJOR TEAR.** If you experience sudden, serious pain accompanied by a big knot on one side of your chest, chances are you've torn the pectoralis major. This usually happens during bench presses, when you suddenly lose control of the bar. Your shoulder is in abduction and you try to force the bar back up. Your pec is under stretch condition, but it tries to contract concentrically. I've seen the muscle tear right at its insertion point at the humerus.

In most cases, surgery is the only remedy. To prevent the injury, don't lift weight that is too heavy. I've known a couple of guys who've had that injury, and it's from trying to do too much weight. Just stay within what you can lift.

**5. SHOULDER DISLOCATION.** With this injury, you know right away that something bad has happened. The shoulder muscles go into spasm, and any arm movement hurts. You'll probably lose the ability to rotate your arm. As one patient explained, "I was doing behind-neck presses and all of a sudden, I heard a pop and my shoulder went dead. I was benching 300 pounds before that, but when I came back after 3-4 weeks, I could barely do 105. I had to quit for three months."



Most experts caution against behind-neck barbell shoulder presses and, to a lesser degree, lat pull-downs behind the neck. These exercises place the shoulder in abduction and external rotation – meaning out and back – and greatly stressing the glenohumeral joint, which isn't a very stable joint to begin with. The head of the humerus rests against the scapula and is kept in place only by some tendons. This creates a generic instability that can be further compromised by the above motions.

**6. TRICEPS TEAR.** This is similar to a pec tear. It's the result of using maximum weight in an eccentric overload. You feel the overload, you're off balance, and you try to straighten the arm. Generally, surgery is the primary remedy.

**7. BICEPS TEAR.** If this sounds familiar, it certainly is. Again, it's a case of using too much weight and losing control in the return phase.

For the most part, these injuries are not inevitable. But care and caution should be taken every time you work out. Even if you're a veteran lifter, injury can strike at any time.

**NOVA Pain & Rehab Center specializes in helping you with Sprains, Strains and Pains. If you or someone you know is having this problem, call us today and schedule an appointment for a consultation and an evaluation. Call 703-535-8887 to schedule your appointment. Remember, waiting to see if the problem will resolve on its own could invite a more serious condition. Get yourself checked out TODAY!**