

Patients Respond Well to Either Surgical or Conservative Treatment

Patients Respond Well to Either Surgical or Conservative Treatment of Shoulder

The shoulder is a well-used and important joint. It allows you to move your arm at will and then bears the weight of your immediate reach. Because of the way the shoulder joint performs, if a nerve is compressed, it can cause significant effects on how your arm will react, so it's important that nerve compression of the shoulder be pinpointed and diagnosed.

One type of nerve injury is called the *suprascapular nerve impingement*. Along the back of your neck runs the upper cervical discs that make up the spine, are numbered from C1 to C7, with C1 being the upper most and C7 being the last in this series. Each level and nerves affecting a different part of the body. With suprascapular nerve impingement, the nerve that runs around and across the collarbone, is affected. Even this, however, has subsections that need to be diagnosed because there are

The two most common notches are the *suprascapular* notch and the *spinoglenoid* notch, usually caused by a narrowing of the nerves. The signs of these notches are shoulder pain in the back and side of the shoulder and perhaps difficulty raising the arm. Muscles may start to *atrophy*, or waste away. When the doctor examines the shoulder, it may be tender and this tenderness

To treat this, if there is no obvious reason causing the nerve pressure (seen by x-ray or further tests), there is no rush for surgery. Conservative management is usually the way to go. This may mean reducing the activity of the shoulder, using anti-inflammatory medications. If after several months, there is no improvement, then it may be necessary for surgery. During the surgery, the surgeon relieves the compression

Another shoulder issue is called *long thoracic nerve palsy*, which comes from the C5, C6, and C7 area. The nerve passes through the neck out to most of the nerves that control movement in your arm. The purpose of this nerve is to move the *scapula*, the bone

If this area has become injured, it's usually because of a blunt trauma to the area or if your neck is turned, with your head in the wrong direction. Signs of this injury are usually pain underneath the scapula, difficulty raising the arm, and a popping or clicking sound. Most patients recover without surgery, although it can take as long as two years for full recovery. To do this, the activity of the arm should be reduced and arm strength. If the problem isn't resolved after a year, then surgery is usually the next choice.

Quadrilateral space syndrome is a condition where a nerve that comes up from behind the brachial plexus and provides innervation to the deltoid muscle around the shoulder itself. If there is damage in that part, patients may complain of shoulder discomfort, not necessarily pain. This injury is often found in adults between the ages of 20 and 35 years and usually on the dominant hand.

Treatment for quadrilateral space syndrome is usually rest for the shoulder, anti-inflammatory medications to reduce inflammation. If after six months, there is no improvement or not enough improvement, surgery may be the next step.

Finally, the last injury covered in this article is the *thoracic outlet syndrome*, which occurs in the area bordered by the neck and shoulder pain and weakness of the arm on the hurt side. If the artery is being pressed upon, the arm may be painful and

To diagnose this problem, doctors do a *neurological* (nerve) examination and see if they can reproduce the symptoms by having the patient perform certain activities to see if there is any blockage in the artery. As with the other shoulder injuries, first treatment is conservative, to try to relieve the symptoms and body posture. This type of injury may require several months of treatment before any improvement is seen. However, surgery may be done.

The authors of this study concluded that the various shoulder nerve syndromes can be quite similar in symptoms and that conservative treatment is effective.

Jason A. Freedman and James A. Shankwiler. Nerve compression syndromes about the shoulder girdle. In *Current Orthopaedics*