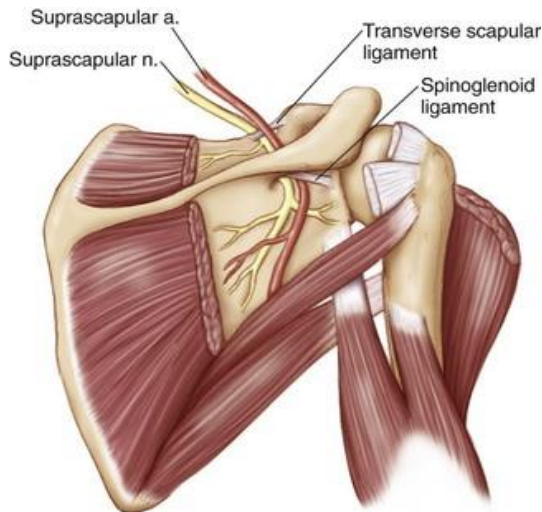


SUPRASCAPULAR NERVE ENTRAPMENT

DESCRIPTION

An uncommon nerve condition in the shoulder causing pain and weakness. It involves compression of the suprascapular nerve at the top or back of the shoulder, usually caused by a ligament, a cyst from the shoulder or excessive stretching. The suprascapular nerve passes in a groove in the shoulder blade (scapula), under a ligament, and then under the supraspinatus muscle (which it supplies) on the top of the shoulder, and then under another ligament before it divides and supplies the infraspinatus muscle in the back of the shoulder. The nerve may be injured before it supplies the supraspinatus muscle (and thus causing weakness of both the supraspinatus and infraspinatus) or after it supplies the supraspinatus (causing weakness of only the infraspinatus). These muscles, which are part of the rotator cuff, are important in stabilizing the shoulder and assisting in raising and in rotating the shoulder and arm.



FREQUENT SIGNS AND SYMPTOMS

- Pain and discomfort (burning or dull ache) that is poorly localized, often in the top or back of the shoulder
- Heaviness or fatigue of the shoulder and arm
- Pain may be made worse by exercise or raising the arm over head
- Weakness raising the arm to the side or overhead, and / or rotating the shoulder outward.
- Tenderness in the top or back of the shoulder
- Atrophy (shrinkage) of the supraspinatus and / or infraspinatus muscle.

CAUSES

- Pressure on the supraspinatus nerve at the top or back of the shoulder, often by a cyst from the shoulder joint.
- Pressure on the supraspinatus nerve at the top or back of the shoulder by one of two ligaments of the shoulder blade that the nerve passes beneath
- Repetitive stretch injury to the nerve

RISK INCREASES WITH

- Contact sports
- Sports that require repetitive overhead activity, such as baseball, volleyball and tennis
- Poor physical conditioning (strength/flexibility) – particularly tightness of the back of the shoulder

EXPECTED OUTCOME

Usually resolves spontaneously. Sometimes, however, surgery is necessary, especially when one or more muscles are atrophied (wasting or shrinkage).

POSSIBLE COMPLICATIONS

- Permanent weakness of the shoulder, particularly rotating arm outward, lifting the arm and inability to throw
- Persistent pain in the shoulder.
- Increasing weakness of the extremity
- Disability and inability to compete

GENERAL TREATMENT CONSIDERATIONS

Initial treatment consists of rest from the offending activity and non-steroidal anti-inflammatory medications to help reduce inflammation and pain. Stretching exercises of the shoulder muscles are useful. Referral to physical therapy and/or an athletic trainer may be recommended for further treatment, including ultrasound and other modalities. If 3 to 6 months of conservative treatment is not successful, surgery may be necessary to free the pinched nerve by cutting the ligaments where the nerve is being pinched. Surgery is also indicated to relieve pressure from the cyst either by removing the cyst and/or damage within the shoulder joint that may be the cause of the cyst. Surgery may be recommended sooner if there is significant atrophy of the muscle(s). When surgery is necessary, it provides almost complete relief in most patients who undergo this operation, though the atrophy may not be reversible.

MEDICATION

- Non-steroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take if surgery planned in 7 days or less), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact him/her immediately if any bleeding, stomach upset or an allergic reaction occurs.
- Pain relievers may be prescribed by your physician, usually only after surgery. Use only as directed.

HEAT AND COLD:

- Cold is used to relieve pain and reduce inflammation for acute and chronic cases. Cold should be applied for 10 - 15 minutes every 2-3 hours for inflammation and pain, and immediately after any activity which aggravates your symptoms. Use ice packs or an ice massage.
- Heat may be used prior to performing stretching and strengthening activities prescribed by your physician, physical therapist or athletic trainer. Use heat pack or a warm soak.

NOTIFY OUR OFFICE IF

- Symptoms get worse or do not improve in 4-8 weeks despite treatment
- New, unexplained symptoms develop. Drugs used in treatment may produce side-effects.