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# TRAPEZIUS PALSY (SPINAL ACCESSORY NERVE PALSY)

## DESCRIPTION

An uncommon nerve condition in the shoulder causing pain and weakness in the shoulder. It involves injury to the spinal accessory nerve in the at the neck or shoulder. The spinal accessory nerve runs from the neck to the trapezius muscle. The nerve can be stretched due to a fall on the shoulder while the neck bends toward the other shoulder, or a direct blow to the shoulder or neck. It may also occur from minor surgeries to the neck. Injury to this nerve results in weakness of the trapezius muscle. The trapezius muscle helps with shoulder blade (scapula) function and injury causes the scapula to pull away from the chest wall with attempted shoulder movement called winging. The scapula is the base from which the shoulder functions. With winging, the shoulder works off a weak base, making shoulder function weak and painful as well.

## FREQUENT SIGNS AND SYMPTOMS

- Pain and discomfort (burning or dull ache) that is poorly localized, often in the back of the shoulder and/or shoulder blade
- Heaviness or fatigue of the arm.
- Loss of power of the shoulder
- Difficulty raising the arm above shoulder level
- Pain in the back when sitting in a chair with a high back due to the scapula hitting the back of the chair.
- Bump in the back of the shoulder (the scapula) that is more obvious when trying to reach to the side or overhead.
- Atrophy (shrinkage) of the trapezius muscle causing the neckline to look asymmetric
- Drooping of the shoulder

## **CAUSES**

- Associated with acromioclavicular or sternoclavicular subluxation (including AC separation)
- Direct blow to the neck or shoulder
- Fall onto shoulder with the head and neck stretched away from the shoulder.
- Unexpected result of surgery

## **RISK INCREASES WITH**

- Contact sports
- Surgery about the neck
- Poor physical conditioning (strength/flexibility)

## **EXPECTED OUTCOME**

Usually complete spontaneous recovery within 3 - 6 months. Surgery is rarely necessary.

# DEPARTMENT OF ORTHOPEDIC SURGERY SPORTS MEDICINE

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### POSSIBLE COMPLICATIONS

- Permanent weakness of the shoulder, particularly lifting power, working with the arm overhead
- Persistent pain in the shoulder.
- Stiffness of 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. The nerve usually recovers spontaneously, though this may take up to 6 months. Maintaining shoulder range of motion exercises while waiting for nerve recovery is of paramount importance. Referral to physical therapy and/or an athletic trainer may be recommended for further treatment, including ultrasound, TENS units (electrical nerve stimulation) and other modalities. Occasionally bracing or a shoulder harness may relieve discomfort while the nerve is recovering. Surgery may be necessary after 3-6 months to explore the nerve if nerve function has not recovered. If this treatment is not successful, surgery may be necessary to replace the lost function of the trapezius muscle with the function of another muscle. This surgery is considered a salvage operation...not meant to get the athlete back to sports, just pain-free activities of daily living.

## **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 6 weeks despite treatment
- New, unexplained symptoms develop. Drugs used in treatment may produce side-effects.