

# TRAPEZIUS PALSY

## (Spinal Accessory Nerve Palsy)



### ■ ■ ■ Description

Trapezius palsy is an uncommon nerve condition in the shoulder, causing pain and weakness. It involves injury to the spinal accessory nerve 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 by 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.

### ■ ■ ■ Common Signs and Symptoms

- Pain and discomfort (burning or dull ache) that is poorly localized, often in the back of the shoulder 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 (AC) 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 around the neck
- Poor physical conditioning (strength and flexibility)

### ■ ■ ■ Preventive Measures

- Appropriately warm up and stretch before practice or competition.
- Maintain appropriate conditioning:
  - Shoulder flexibility
  - Muscle strength and endurance
- Wear appropriate shoulder protective pads.

### ■ ■ ■ Expected Outcome

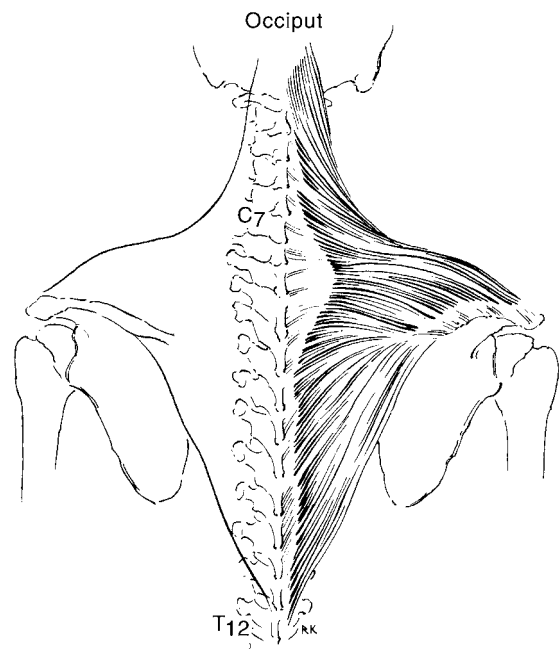
There is usually complete spontaneous recovery within 3 to 6 months. Surgery is rarely necessary.

### ■ ■ ■ Possible Complications

- Permanent weakness of the shoulder, particularly lifting power and when 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 nonsteroidal anti-inflammatory medications to help reduce inflammation and pain. The nerve usually recovers spontaneously, although this may take up to 6 months. Performing shoulder range-of-motion exercises while waiting for nerve recovery is of paramount importance. Referral to a physical therapist or an athletic trainer may be recommended for further treatment, including ultrasound and transcutaneous electronic nerve stimulation (TENS). Occasionally, bracing or a shoulder harness may relieve discomfort while the nerve is recovering. Surgery may be necessary after 3 to 6 months to explore the nerve if nerve function has not recovered. If



**Figure 1**

From Rockwood CA Jr., Matsen FA III: *The Shoulder*, 2nd ed. Philadelphia, WB Saunders, 1998, p. 54.

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; it is not meant to enable the athlete to return to sports, just pain-free activities of daily living.

### ■ ■ ■ Medication

- Nonsteroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take within 7 days before surgery), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact your physician immediately if any bleeding, stomach upset, or signs of an allergic reaction occur.
- 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 to 15 minutes every 2 to 3 hours for inflammation and pain and immediately after any activity that aggravates your symptoms. Use ice packs or an ice massage.
- Heat may be used before performing stretching and strengthening activities prescribed by your physician, physical therapist, or athletic trainer. Use a heat pack or a warm soak.

### ■ ■ ■ Notify Our Office If

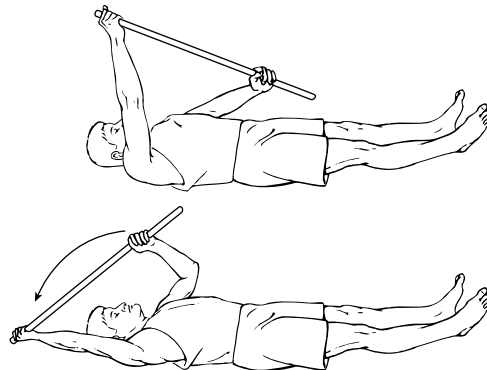
- Symptoms get worse or do not improve in 6 weeks despite treatment
- New, unexplained symptoms develop (drugs used in treatment may produce side effects)

## EXERCISES

### ➤ RANGE OF MOTION AND STRETCHING EXERCISES • Trapezius Palsy (Spinal Accessory Nerve Palsy)

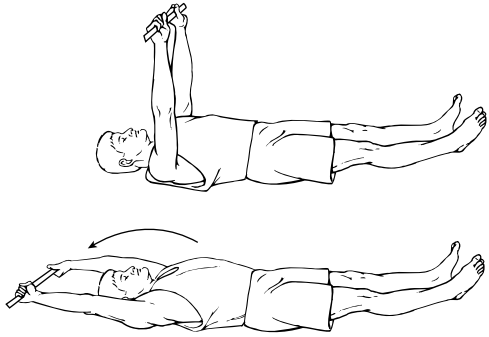
These are some of the *initial* exercises you may start your rehabilitation program with until you see your physician, physical therapist, or athletic trainer again or until your symptoms are resolved. Please remember:

- Flexible tissue is more tolerant of the stresses placed on it during activities.
- Each stretch should be held for 20 to 30 seconds.
- A *gentle* stretching sensation should be felt.



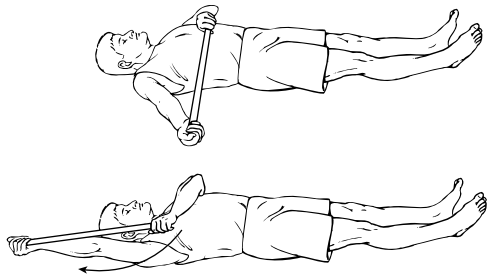
### SHOULDER • Flexion

1. Lie on your back. Grasp the bottom of a stick, handle of an umbrella, or blade of a golf club in your \_\_\_\_ hand as shown.
2. Using the stick, raise your arm overhead as shown until you feel a gentle stretch. Lead with the thumb in a “thumbs-up” position.
3. Repeat exercise \_\_\_\_ times, \_\_\_\_ times per day. Hold each repetition 5 to 10 seconds.



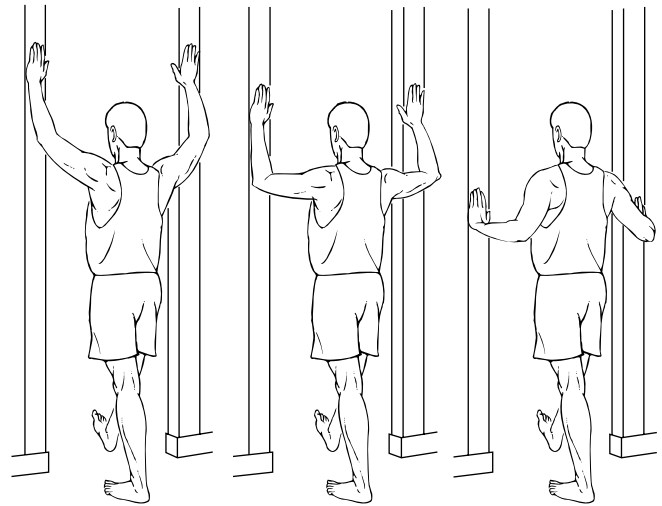
**SHOULDER • Flexion**

1. Lie on your back holding a stick in both hands, keeping your hands shoulder-width apart.
2. Raise both hands over your head until you feel a gentle stretch.
3. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day. Hold each repetition 5 to 10 seconds.



**SHOULDER • Abduction**

1. Lie on your back holding a stick, umbrella handle, or golf club in your hand as shown. The hand should be in the “thumbs-up” position.
2. Using the stick, slowly push your arm away from your side and as far overhead as you can without pain. Push until you feel a gentle stretch.
3. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day. Hold each repetition 5 to 10 seconds.



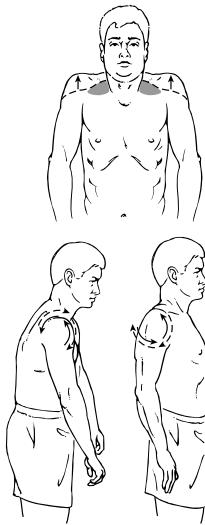
**SHOULDER • External Rotation and Abduction**

1. Stand in front of a door frame as shown.
2. Your hands and forearms may be placed on the door frame in any of the positions shown in the diagram. *Your physician, physical therapist, or athletic trainer will instruct you regarding which position you are to use! This exercise may be done with both arms at the same time or just one arm.*
3. Slowly step through the doorway with one foot. Use this stepping motion to obtain a stretch in the front of the shoulder and chest. ***Do not lean through the doorway.***
4. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day. Hold each repetition 5 to 10 seconds.

> **STRENGTHENING EXERCISES** • Trapezius Palsy (Spinal Accessory Nerve Palsy)

These are some of the *initial* exercises you may start your rehabilitation program with until you see your physician, physical therapist, or athletic trainer again or until your symptoms are resolved. Please remember:

- Strong muscles with good endurance tolerate stress better.
- Do the exercises as *initially* prescribed by your physician, physical therapist, or athletic trainer. Progress slowly with each exercise, gradually increasing the number of repetitions and weight used under their guidance.



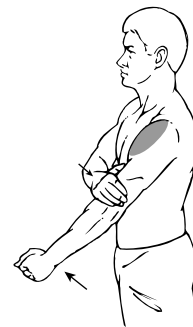
**SHOULDER** • Scapular Elevation, Shrugs

1. Stand with your arms at your side in a *good erect posture*.
2. Subtly “shrug” your shoulders up and back toward your ears.
3. Hold this position for \_\_\_\_\_ seconds and then *slowly* return to the starting position.
4. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.
5. You may perform this exercise with a \_\_\_\_\_ pound weight in each hand.
6. Avoid standing in a slouched position with poor posture by using this technique intermittently throughout the day.



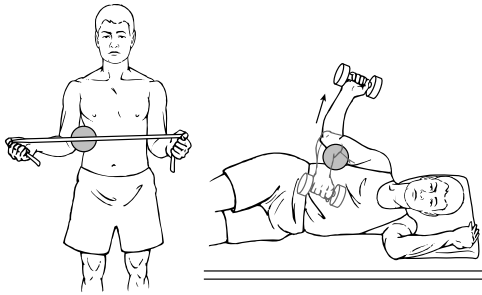
**STRENGTH** • Shoulder Abduction, Isometric

1. While standing, raise the \_\_\_\_\_ arm slightly away from the body as shown.
2. Place the other hand on top of your arm and push down. Do not allow your arm to move. Push as hard as you can without having any pain or moving the arm.
3. Hold this position for \_\_\_\_\_ seconds and then *slowly* return to the starting position.
4. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.



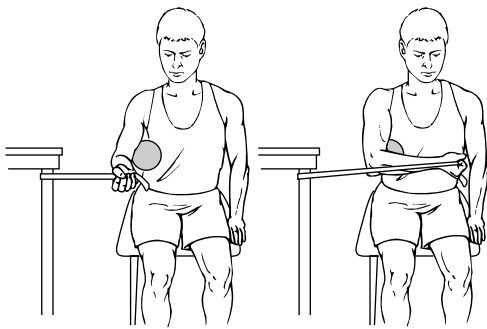
**STRENGTH** • Shoulder Flexion, Isometric

1. While standing, raise your \_\_\_\_\_ arm straight in front of your body as shown.
2. Place the other hand on top of your arm and push down. Do not allow your arm to move. Push as hard as you can without having any pain or moving the arm.
3. Hold this position for \_\_\_\_\_ seconds and then *slowly* return to the starting position.
4. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.



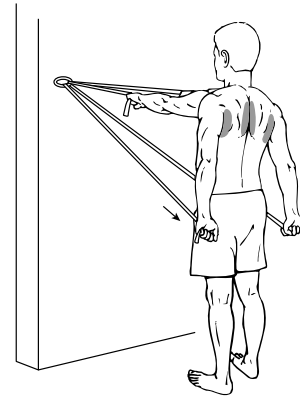
**STRENGTH • Shoulder External Rotation**

1. Lie on your side with your \_\_\_\_ arm up and the elbow bent to 90 degrees, or stand with your arms at your side and the elbows bent to 90 degrees as shown. Place a small rubber ball (4 to 6 inches in diameter) or rolled-up towel between your elbow and your side as shown.
2. Hold a \_\_\_\_ pound weight in your hand and turn the arm up toward the ceiling, keeping the elbow bent as shown. If using rubber band/tubing, turn the arm(s) out from your side while keeping the elbows bent.
3. Do this slowly and in control through your *pain free* range of motion only. If this is painful, stop and discuss this with your physician, physical therapist, or athletic trainer.
4. Hold this position for \_\_\_\_ seconds and then *slowly* return to the starting position.
5. Repeat exercise \_\_\_\_ times, \_\_\_\_ times per day.



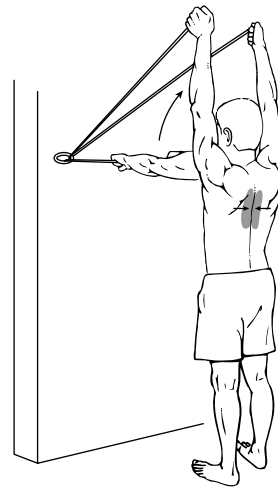
**SHOULDER • Internal Rotation**

1. Anchor the rubber band/tubing to a heavy/solid object as shown.
2. Place a small ball or towel between your elbow and body as shown in the drawing and bend your elbow to 90 degrees. Squeeze the ball gently to the side of your chest with your elbow.
3. Turn/rotate your arm in toward your body (across your chest/stomach). Do not let the ball move/fall away from the side of your chest.
4. Hold this position for \_\_\_\_ seconds and then *slowly* return to the starting position.
5. Repeat exercise \_\_\_\_ times, \_\_\_\_ times per day.



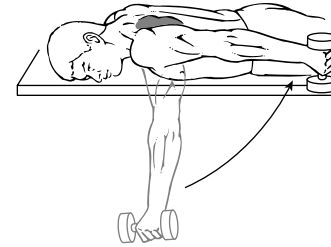
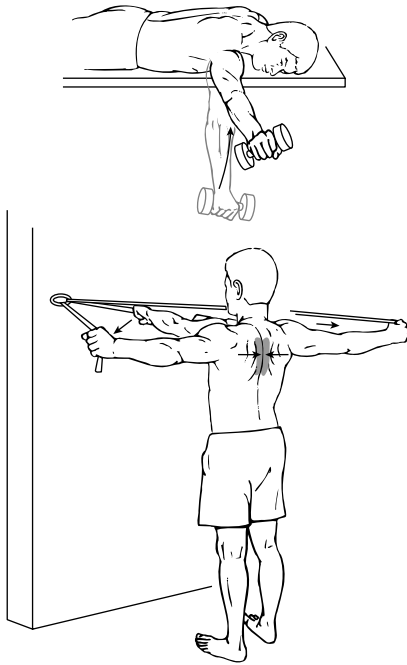
**STRENGTH • Shoulder Extension**

1. Anchor/secure rubber band/tubing around a stable object such as a stair post or around the knob of a closed door.
2. Stand holding the rubber band/tubing in front of you with your arms extended as shown.
3. Squeeze/pinch your shoulder blades together and pull your arms down and backward as shown. *Do not pull arms past the midline of your body.*
4. Hold this position for \_\_\_\_ seconds and then *slowly* return to the starting position.
5. Repeat exercise \_\_\_\_ times, \_\_\_\_ times per day.



**SHOULDER • Scapular Retraction and Elevation**

1. Hold one end of the band/tubing in each hand. Your elbows should be bent 90 degrees and at shoulder height.
2. Squeeze/pinch your shoulder blades together.
3. Keeping both arms straight, raise them both up overhead.
4. Lead with your thumbs so that they are in a “thumbs-up” position.
5. Hold this position for \_\_\_\_ seconds and then *slowly* return to the starting position.
6. Repeat exercise \_\_\_\_ times, \_\_\_\_ times per day.



### STRENGTH • Shoulder Extension

1. Lie on your stomach with your \_\_\_\_\_ arm off the edge of the bed.
2. Holding a \_\_\_\_\_ pound weight in your hand, slowly raise the arm up and backward toward the ceiling.
3. Hold this position for \_\_\_\_\_ seconds and then *slowly* return to the starting position.
4. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.

### SHOULDER • Horizontal Abduction

1. *If using a weight*—Lie on your stomach with your \_\_\_\_\_ arm over the edge of the bed as shown, holding a \_\_\_\_\_ pound weight in your hand.
2. Raise the arm up slowly so that it is level with the edge of the bed. Keep your elbow straight.
3. Hold this position for \_\_\_\_\_ seconds and then *slowly* return to the starting position.
4. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.
1. *If using rubber band/tubing*—Anchor the rubber band/tubing to a solid object.
2. Hold one end of the band/tubing in each hand as shown with your arms straight out in front of you.
3. Spread your arms apart, pulling straight backward, keeping them parallel to the floor.
4. Hold this position for \_\_\_\_\_ seconds and then *slowly* return to the starting position.
5. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.

Notes:

(Up to 4400 characters only)

Notes and suggestions