



Trapezius Palsy (Spinal Accessory Nerve Palsy)

DESCRIPTION

Trapezius palsy is an uncommon nerve condition in the shoulder that causes 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 as the result of a direct blow to the shoulder or neck or from a fall on the shoulder with the neck bent toward the other shoulder. It may also occur from minor surgeries to the neck. Injury to this nerve results in weakness of the trapezius muscle, which helps with shoulder blade (scapula) function; injury causes the scapula to pull away from the chest wall with attempted shoulder movement, called *scapular 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.

COMMON SIGNS AND SYMPTOMS

- Pain and discomfort, usually a 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, a result of the scapula hitting the back of the chair
- A bump in the back of the shoulder at 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
- A direct blow to the neck or shoulder
- Falling onto the shoulder with the head and neck stretched away from the shoulder
- A result of surgery

FACTORS THAT INCREASE RISK

- Contact sports
- Surgery around the neck
- Poor physical conditioning (strength, flexibility)

PREVENTIVE MEASURES

- Appropriately warm up and stretch before practice and competition.
- Maintain appropriate conditioning that includes shoulder flexibility, muscle strength, and endurance training.
- Wear appropriate shoulder protective pads.

EXPECTED OUTCOME

Recovery from trapezius palsy is usually complete and spontaneous within 3 to 6 months. Surgery is rarely necessary.

POSSIBLE COMPLICATIONS

- Permanent weakness of the shoulder, particularly in 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 activities that produce symptoms and nonsteroidal antiinflammatory 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, and surgery may be necessary after 3 to 6 months to explore the nerve, if nerve function has not recovered. If treatment is not successful, surgery may be necessary to replace the lost function of the trapezius muscle with the function of another muscle. Such surgery is considered a salvage operation; it is not meant to enable the athlete to return to sports, but rather to enjoy pain-free activities of daily living.

MEDICATION

- Nonsteroidal antiinflammatory medications, such as aspirin and ibuprofen (do not take for 7 days before surgery), or other over-the-counter pain relievers, such

1224 TRAPEZIUS PALSY

as acetaminophen, are often recommended. Take these as directed by your physician, and contact your doctor immediately if any bleeding, stomach upset, or signs of an allergic reaction occur.

- Stronger pain relievers may be prescribed by your physician, usually only after surgery. Use these only as directed, and take only as much as you need.

HEAT AND COLD

- Cold is used to relieve pain and reduce inflammation for acute and chronic cases. It should be applied for 10 to 15 minutes every 2 to 3 hours as needed 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.

WHEN TO CALL YOUR DOCTOR

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

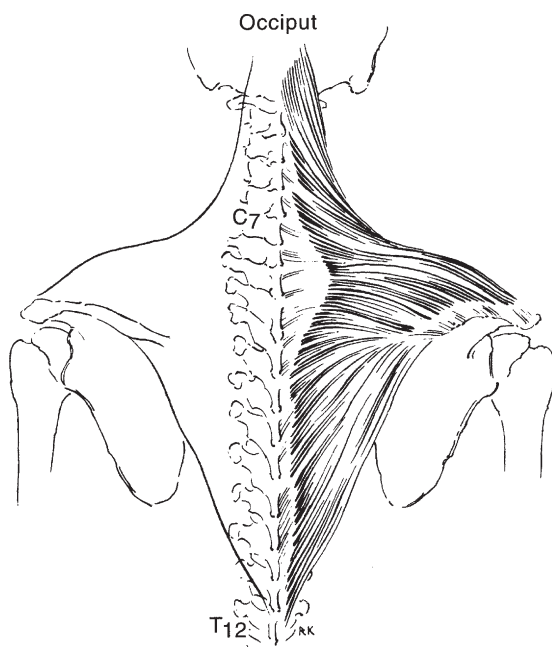
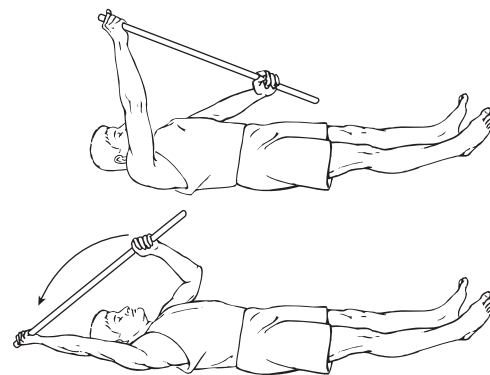


FIGURE 1 From Rockwood CA Jr, Matsen FA III: *The shoulder*, ed 2, Philadelphia, 1998, W.B. Saunders, p 54.

RANGE OF MOTION AND STRETCHING EXERCISES Trapezius Palsy

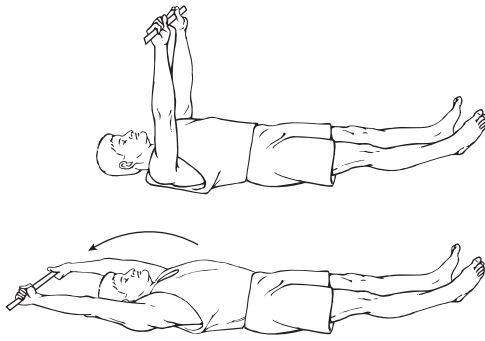
These are some of the *initial* exercises you may use to start your rehabilitation program, until you see your physician, physical therapist, or athletic trainer again, or until your symptoms resolve. Please remember:

- Flexible tissue is more tolerant of the stresses placed on it.
- A *gentle* stretching sensation should be felt.



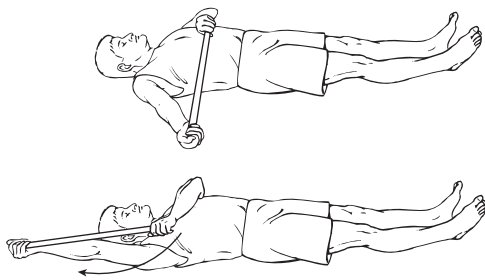
RANGE OF MOTION • Shoulder Flexion, Single Arm

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 your thumb in a “thumbs up” position.
3. Hold each repetition for ____ seconds, and return to the starting position.
4. Repeat this exercise ____ times, ____ times per day.



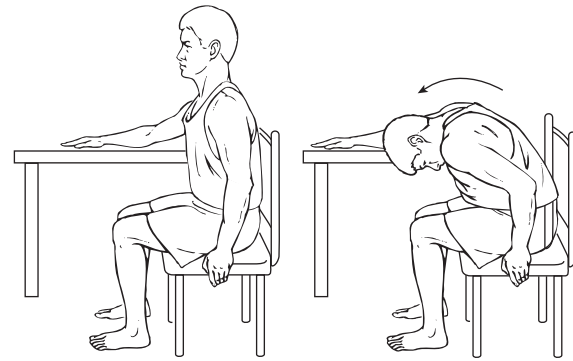
RANGE OF MOTION • Shoulder Flexion, Double Arm

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. Hold each repetition for ____ seconds, and return to the starting position.
4. Repeat this exercise ____ times, ____ times per day.



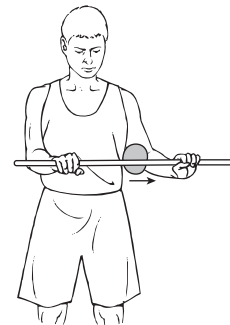
RANGE OF MOTION • Shoulder Abduction, Single Arm

1. Lie on your back holding a stick, umbrella handle, or golf club in your hand as shown. Your hand should be in a “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. Hold each repetition for ____ seconds, and return to the starting position.
4. Repeat this exercise ____ times, ____ times per day.



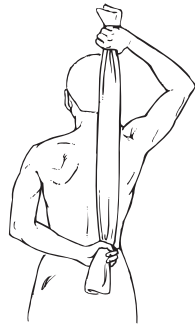
RANGE OF MOTION • Shoulder Flexion

1. Sit in a chair with your weak arm on a table as shown.
2. Lean forward slowly, sliding your arm forward on the table, until you feel a gentle stretch.
3. Hold each repetition for ____ seconds, and return to the starting position.
4. Repeat this exercise ____ times, ____ times per day.



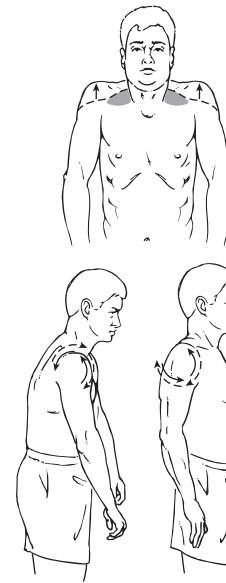
RANGE OF MOTION • Shoulder External Rotation

1. Lie on your back or stand with your weak arm at your side and your elbow bent to 90 degrees. Hold a stick, umbrella handle, or golf club in your hands as shown.
2. Using the stick, rotate your hand and forearm away from your body as shown. *Make sure you keep your upper arm and elbow at your side.*
3. Hold each repetition for ____ seconds, and return to the starting position.
4. Repeat this exercise ____ times, ____ times per day.



RANGE OF MOTION • Shoulder Internal Rotation

1. Place the hand of your weak arm behind your back.
2. Drape a towel over your opposite shoulder, and grasp it with the hand that is behind your back.
3. Use the towel to *slowly* pull your hand farther up your back, until you feel a gentle stretch.
4. Hold each repetition for ____ seconds, then return to the starting position.
5. Repeat this exercise ____ times, ____ times per day.



STRENGTH • Scapular Elevation, Shrugs

1. Stand in a good, erect posture with your arms at your sides.
2. Gently shrug your shoulders up and back toward your ears.
3. Hold this position for ____ seconds, and *slowly* return to the starting position.
4. Repeat this exercise ____ times, ____ times per day.

You may perform this exercise with a ____ pound weight in each hand. Avoid standing in a slouched position with poor posture by using this technique throughout the day.

STRENGTHENING EXERCISES
Trapezius Palsy

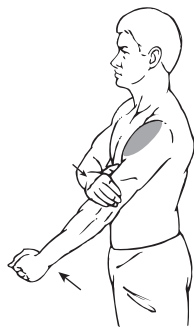
These are some of the *initial* exercises you may use to start your rehabilitation program, until you see your physician, physical therapist, or athletic trainer again, or until your symptoms resolve. Please remember:

- 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 under their guidance, gradually increasing the number of repetitions and weight used.



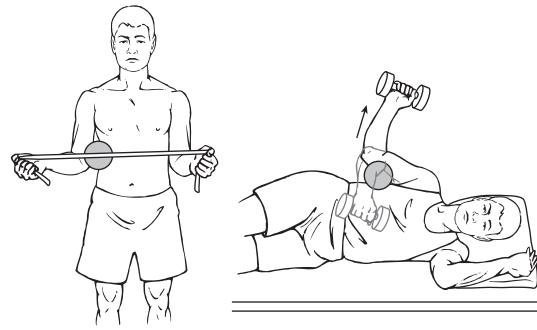
STRENGTH • Shoulder Abduction, Isometric

1. Stand and raise your weak arm slightly away from your body as shown.
2. Place your other hand on top of your arm, and push down as hard as you can without having any pain and without moving your arm.
3. Hold this position for ____ seconds, and *slowly* return to the starting position.
4. Repeat this exercise ____ times, ____ times per day.



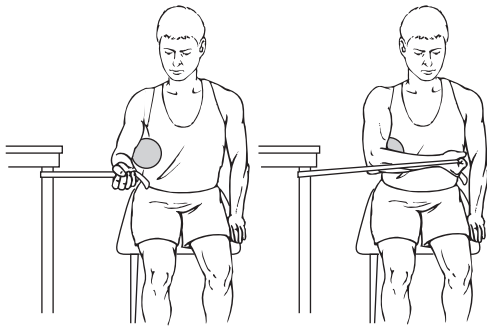
STRENGTH • Shoulder Flexion, Isometric

1. Stand and raise your weak arm straight in front of you as shown.
2. Place your other hand on top of your arm, and push as hard as you can without having any pain and without moving your arm.
3. Hold this position for ____ seconds, and *slowly* return to the starting position.
4. Repeat this exercise ____ times, ____ times per day.



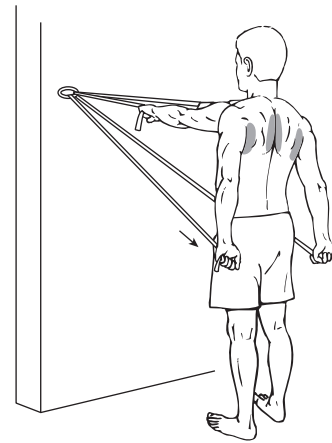
STRENGTH • Shoulder External Rotation

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



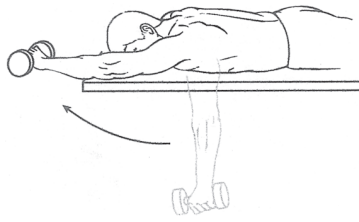
STRENGTH • Shoulder Internal Rotation

1. Anchor a rubber band/tubing to a heavy, stable object as shown.
2. Place a small ball (4 to 6 inches in diameter) or a rolled-up towel between your elbow and body as shown, and bend your elbow to 90 degrees.
3. Squeeze the ball gently to your side with your elbow.
4. Rotate your arm in toward your body and across your chest and stomach. Do not let the ball move away from your side.
5. Hold this position for ____ seconds, and *slowly* return to the starting position.
6. Repeat this exercise ____ times, ____ times per day.



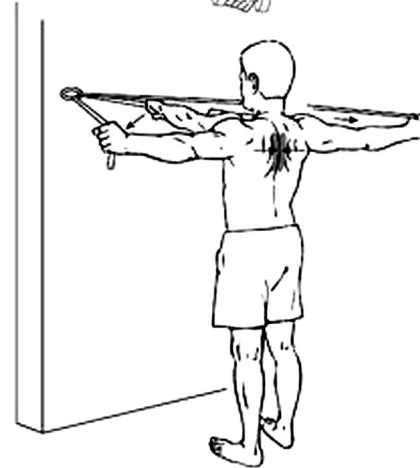
STRENGTH • Shoulder Extension

1. Anchor a 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 your shoulder blades together, and pull your arms down and backward as shown. *Do not pull your arms past the midline of your body.*
4. Hold this position for ____ seconds, and *slowly* return to the starting position.
5. Repeat this exercise ____ times, ____ times per day.



STRENGTH • Scapula Retraction/Elevation

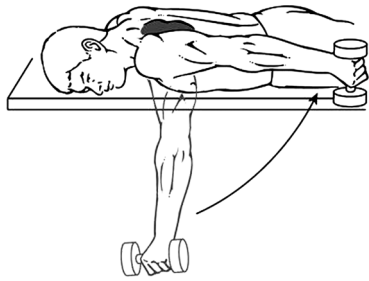
1. Lie on your stomach on a bed with your weak arm over the edge of the bed as shown, holding a ____ pound weight in your hand.
2. Raise your arm up slowly in front of you, so that it is level with the edge of the bed. Keep your elbow straight.
3. Hold this position for ____ seconds, and *slowly* return to the starting position.
4. Repeat this exercise ____ times, ____ times per day.



STRENGTH • Shoulder Horizontal Abduction

1. *If using a weight:* Lie on your stomach on a bed with your weak arm over the edge as shown, holding a ____ pound weight in your hand.
2. Raise your arm up *slowly* as shown, so that it is level with the edge of the bed. Keep your elbow straight.
3. Hold this position for ____ seconds, and *slowly* return to the starting position.
4. Repeat this exercise ____ times, ____ times per day.
1. *If using a rubber band/tubing:* Anchor the rubber band/tubing to a fixed 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 your arms parallel to the floor.
4. Hold this position for ____ seconds, and *slowly* return to the starting position.
5. Repeat this exercise ____ times, ____ times per day.

1230 TRAPEZIUS PALSY



STRENGTH • Shoulder Extension

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