



Acromioclavicular Separation (Separated Shoulder)

Exercises:
10 seconds
10 times
1 time per day

DESCRIPTION

Acromioclavicular separation is a sprain (partial or complete tear) or injury of the ligaments on the top of the shoulder, where the collarbone (clavicle) attaches to the roof of the shoulder (acromion). The structures involved are the acromioclavicular (AC) and coracoclavicular (CC) ligaments. These ligaments attach the clavicle to the acromion, the roof of the shoulder that is part of the shoulder blade (scapula) or part of the scapula called the *coracoid*.

FREQUENT SIGNS AND SYMPTOMS

- Tenderness and swelling or a bump on top of the shoulder at the AC joint
- Bruising that appears at the injury site and sometimes on the chest, usually within 48 hours
- Pain and/or loss of strength upon attempting overhead activities or reaching across the body

CAUSES

- Usually the result of an impact or falling on the tip of the shoulder
- Falling on an outstretched hand or on the tip of the elbow

FACTORS THAT INCREASE RISK

- Sports that require contact or collision and throwing sports, such as racquetball and squash
- Poor physical conditioning
- Previous shoulder sprain or dislocation
- Inadequate protective equipment

PREVENTIVE MEASURES

- Warm up and stretching before practice or competition
- Conditioning, including shoulder and arm flexibility, muscle strength, and endurance
- Properly fitting protective equipment
- Proper technique and coaching, including instruction on how to fall and land
- Taping, protective strapping or padding, or an adhesive bandage before practice or competition

EXPECTED OUTCOME

- Usually symptoms are curable with appropriate treatment.
- It is important to allow adequate healing time before resuming activity.

- With proper rehabilitation, permanent disability can be avoided without surgical intervention.
- Healing time varies with the type of sport and position played, the arm injured (dominant versus nondominant), and the severity of the sprain.

POSSIBLE COMPLICATIONS

- Weakness and fatigue of the arm or shoulder (uncommon)
- Continued pain and inflammation of the AC joint
- If activities are resumed too early, prolonged healing time and susceptibility to recurrent injury
- Prolonged disability (occasionally)
- Unstable or arthritic shoulder following repeated injury

GENERAL TREATMENT CONSIDERATIONS

Initial treatment consists of medication and ice to relieve pain, stretching to prevent shoulder stiffness, and modification of activities to allow ligaments to heal. Treatment options include surgical and nonsurgical intervention. Return to sports activity is much earlier with nonoperative treatment and is based on the type of sport and position, the arm injured (dominant versus nondominant), and the severity of the sprain. Surgical intervention requires 4 to 6 months to return to sports.

Nonsurgical treatment usually is recommended and is successful, with full return to activity and no loss of strength for most sprains of the AC joint. A sling is usually prescribed initially for comfort. *Surgical treatment* is usually reserved for those patients with severe sprains, particularly for those who are heavy laborers, throwing athletes, or those who have failed 2 to 6 months of conservative treatment.

MEDICATION

- Nonsteroidal antiinflammatory medications, such as aspirin and ibuprofen (do not take within 7 days of surgery), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact your doctor immediately if any bleeding, stomach upset, or allergic reaction occurs.
- Topical ointments may be of benefit.
- Pain relievers may be prescribed. Use these only as directed, and take only as much as you need.
- Injections of corticosteroids may be given to reduce inflammation, although they are not usually given for acute injuries. Injections of a long-acting local anesthetic are not usually given.

HEAT AND COLD

- Cold is used to relieve pain and reduce inflammation for acute and chronic cases. Cold should be applied for 20 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 prior to performing prescribed stretching and strengthening activities. Use a heat pack or a warm soak.

WHEN TO CALL YOUR DOCTOR

- Pain, swelling, or bruising worsens despite treatment.
- You experience pain, numbness, or coldness in the arm.
- A blue, gray, or dusky color appears in the fingernails.
- New, unexplained symptoms develop. Drugs used in treatment may produce side effects.

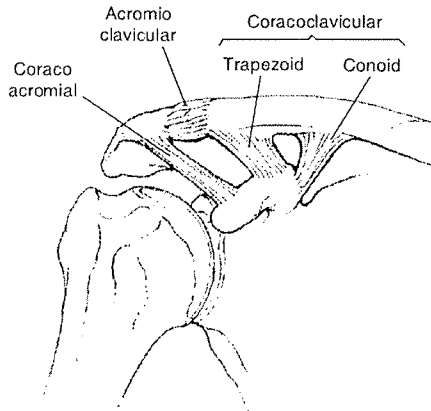


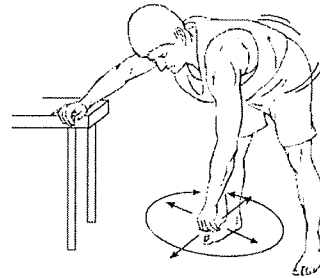
FIGURE 1 From Jobe FW: *Operative techniques in upper extremity sports injuries*, St Louis, 1996, Mosby Year Book, p. 342.

RANGE OF MOTION AND STRETCHING EXERCISES
Acromioclavicular Separation

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:

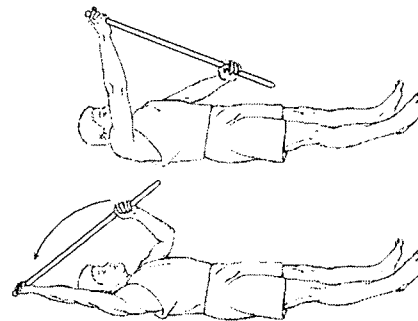
- Flexible tissue is more tolerant of the stresses placed on it during activities.
- Each stretch should be held for 20 to 30 seconds.
- A *gentle* stretching sensation should be felt.

Safran M, Zachazewski J, Stone D: *Instructions for Sports Medicine Patients*, 2nd Edition



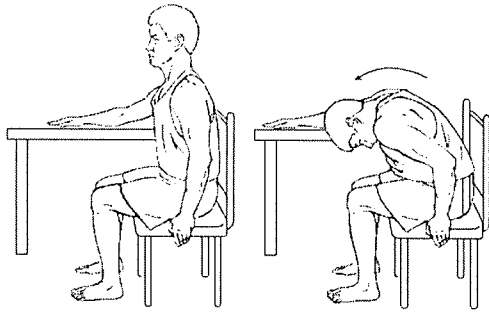
RANGE OF MOTION • Shoulder Pendulum

1. Lean forward at the waist, letting your ____ arm hang freely. Support yourself by placing the opposite hand on a chair, table, or counter as shown.
2. Sway your *whole body* slowly forward and back to cause your arm to move. Let your arm hang freely, and do not tense it up.
3. Sway your body side to side and move in circular patterns clockwise and counterclockwise.
4. Do ____ repetitions in each direction.
5. Repeat this exercise ____ times, ____ times per day.



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 the thumb in a “thumbs up” position.
3. Repeat this exercise ____ times, ____ times per day. Hold each repetition ____ seconds.



RANGE OF MOTION • Shoulder Flexion

1. Sit in a chair with your _____ arm on a table and your hand in a “thumbs up” position. You can also do this exercise with your palm flat on the table as shown in the drawing, but this position is slightly more difficult.
2. Lean forward, sliding your arm forward on the table until you feel a gentle stretch.
3. Return to the starting position.
4. Repeat this exercise _____ times, _____ times per day. Hold each repetition _____ seconds.

STRENGTHENING EXERCISES
Acromioclavicular Separation

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. While standing, raise your _____ arm slightly away from 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 pain and without moving the arm.
3. Hold this position for _____ seconds, and *slowly* return to the starting position.
4. Repeat this exercise _____ times, _____ times per day.



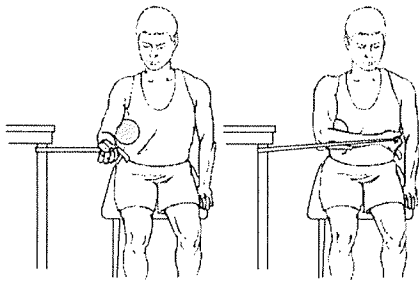
STRENGTH • Shoulder Internal Rotation, Isometric

1. Bend your _____ elbow to 90 degrees as shown, holding your arm slightly in front of your body.
2. Place your opposite hand on the inside of your wrist as shown.
3. Try to rotate your arm inward, toward the body, as if it were a gate swinging closed. Resist this motion with the hand inside your wrist. Do not let any motion occur.
4. Hold this position for _____ seconds.
5. Repeat this exercise _____ times, _____ times per day.



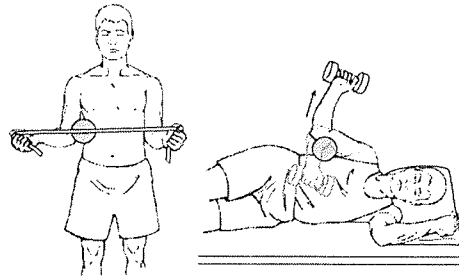
STRENGTH • Shoulder External Rotation, Isometric

1. Bend your _____ elbow to 90 degrees as shown, holding your arm slightly in front of your body.
2. Place your opposite hand over your wrist as shown.
3. Try to rotate your arm outward, away from your body, as if it were a gate swinging open. Resist this motion with the hand over your wrist. Do not let any motion occur.
4. Hold this position for _____ seconds.
5. Repeat this exercise _____ times, _____ times per day.



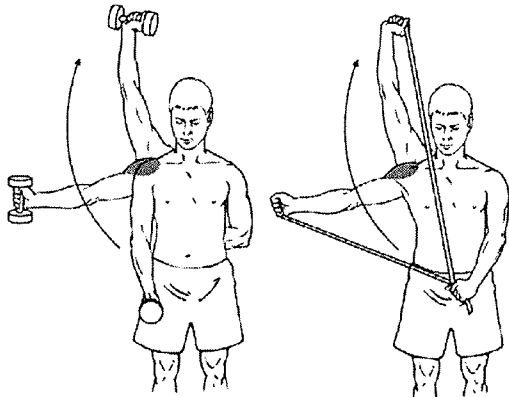
STRENGTH • Shoulder Internal Rotation

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



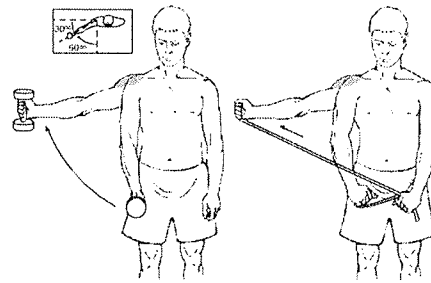
STRENGTH • Shoulder External Rotation

1. Lie on your side with your _____ arm up and the elbow bent to 90 degrees, or stand with your arms at your sides and with 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 your arm up toward the ceiling, keeping your elbow bent as shown. If using a rubber band or tubing, turn your arms out while keeping your elbows bent.
3. Do this *slowly* and in 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.



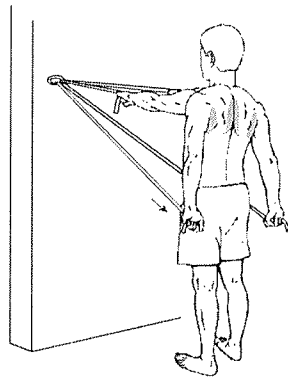
STRENGTH • Shoulder Abduction

1. Stand holding a weight in your hand with your palm facing your body as shown, or hold the rubber band/tubing as shown.
2. *Slowly* raise your arm up to the side and as far overhead as you can in your *pain-free* range. If this is painful, stop and discuss this with your physician, physical therapist, or athletic trainer. *You should not progress above shoulder height unless instructed to do so by your physician, physical therapist, or athletic trainer.* If you are cleared to go above shoulder height, as you raise the arm to shoulder height, begin to turn the palm toward the ceiling.
3. *Slowly* return to the starting position.
4. Repeat this exercise _____ times, _____ times per day.



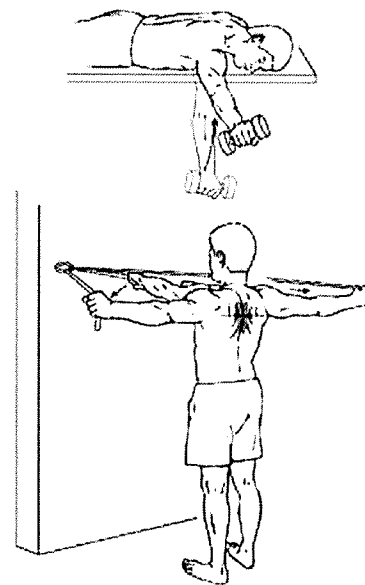
STRENGTH • Shoulder Scaption

1. Hold a weight in your hand with your arm at your side but slightly forward (approximately 30 degrees; see the small diagram). This exercise may also be done with rubber band or tubing as shown.
2. Your hand should be in a “thumbs up” position.
3. *Slowly* raise your arm in a “thumbs up” position through your *pain-free* range. If this is painful, stop and discuss this with your physician, physical therapist, or athletic trainer. Do not allow your shoulder to shrug while doing this exercise.
4. Hold this position for _____ seconds, and *slowly* return to the starting position.
5. Repeat this exercise _____ times, _____ times per day.



STRENGTH • Shoulder Extension

1. Secure a rubber band or 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 down and backward as shown.
3. Squeeze 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 *slowly* return to the starting position.
5. Repeat this exercise _____ times, _____ times per day.



STRENGTH • Shoulder Horizontal Abduction

1. *If using a weight:* lie on your stomach with your injured arm over the edge of the bed as shown, holding a _____ pound weight in your hand.
2. Raise your arm up *slowly* so that it is level with the edge of the bed. Keep your elbow straight.
3. Hold this position for _____ seconds, then *slowly* return to the starting position.
4. Repeat this exercise _____ times, _____ times per day.
5. *If using a rubber band or tubing:* anchor it to a fixed object, such as a stair post.
6. Hold one end of the band or tubing in each hand as shown, with the arms straight in front of you.
7. Spread the arms apart, pulling straight backward and keeping arms parallel to the floor.
8. Hold this position for _____ seconds, and *slowly* return to the starting point.
9. Repeat this exercise _____ times, _____ times per day.