

A GUIDE TO SHOULDER SEPARATION

KAPI'OLANI ORTHOPAEDIC ASSOCIATES

Pediatric Orthopaedics

Spine Deformity

Sports & Dance Medicine

Young Adult Hip Preservation

1319 Punahou Street
Suite #630
Honolulu, Hawaii 96826
Phone: (808) 945-3766
FAX: (808) 942-9837
www.kapiolani.org

Robert C. Drukin, M.D.
Division Head
Pediatric Orthopaedics
Associate Clinical Professor
Department of Surgery, John A.
Burns School of Medicine,
University of Hawaii

William E. Burkhalter, M.D.
Pediatric Orthopaedic Surgeon
Assistant Clinical Professor
Department of Surgery, John A.
Burns School of Medicine,
University of Hawaii

Jennifer R. King, D.O.
Pediatric Sports Medicine
Assistant Clinical Professor
Department of Surgery, John A.
Burns School of Medicine,
University of Hawaii

What is a shoulder separation?

A shoulder separation occurs when you tear the ligaments that hold your collarbone (clavicle) to the joint where it meets the shoulder blade. Your collarbone may move out of its normal place and push up the skin on the top of your shoulder. Another term for shoulder separation is acromioclavicular (AC) separation or sprain.

Shoulder separations, or sprains, are graded I, II, and III, depending on how far the collarbone is separated from the shoulder. A grade I sprain has tenderness but no actual separation. A grade II sprain has slight separation of the clavicle from the shoulder, and grade III has a greater separation.

How does it occur?

A shoulder separation can result from a blow to your shoulder or a fall on your shoulder. It also can result from a fall on your outstretched hand or arm. It is a common injury in contact sports such as football, rugby, hockey, or lacrosse. It may occur from falling onto a hard surface, such as might happen during downhill skiing, volleyball, rock climbing, and soccer.

What are the symptoms?

Symptoms include the following:

- Severe pain at the moment of the injury occurs
- limited shoulder movement and tenderness on top of your shoulder at the end of your collarbone
- swelling and bruising of your shoulder area
- a misshapen shoulder

How is it diagnosed?

Your doctor will examine your shoulder for tenderness and a bump over the tip of your collarbone. To make sure it is an AC separation and not a fracture, x-rays are necessary.

How is it treated?

Immediately after your injury, put an ice pack on your shoulder for 20 to 30 minutes. Continue to put ice on your shoulder every 3 to 4 hours for the first 2 to 3 days, then as needed for the next several weeks. Cold helps reduce the pain, swelling, and inflammation.

The treatment of your separated shoulder depends on the severity. Grade I separation and some grade II separations and grade III separations may be placed in a sling or shoulder immobilizer. The sling or immobilizer will keep you from lifting your arm away from your chest and help healing of ligaments. Your shoulder will be immobilized until you are pain free. Then you will begin rehabilitation exercises. Your doctor may prescribe an anti-inflammatory medication or other pain medication.

For most grade II and grade III separations treatment is the same. However, in some situations surgery may be needed to the doctor may need to reposition the bones or repair torn ligaments. Your arm will then be in a sling for up to 6 weeks to allow healing before you begin rehabilitation exercises. You should consult an orthopedic surgeon if you have a severe grade III injury.

How long will the effects of a shoulder separation last?

Some separations heal by themselves in 2 to 4 weeks without any loss of shoulder use. However, sometimes slight stiffness or loss of movement in the shoulder may occur, which may be temporary or, rarely, long-lasting.

A severe separation may take 2 months or more to heal, particularly if you have surgery to repair it.

You may have a permanent bump over your shoulder joint after a separation regardless of treatment. The bump does not normally cause other medical problems.

How can I take care of myself?

- Avoid participation in sports until the injury has healed.
- You should move your shoulder as the pain subsides to prevent a frozen or stiff shoulder
- With your doctor's permission, work with a trainer or physical therapist to strengthen your shoulder.

When can I return to my sport or activity?

The goal of rehabilitation is to return you to your sport or activity as soon as is safely possible. If you return too soon you may worsen your injury, which could lead to permanent damage. Everyone recovers from injury at a different rate. Return to your sport will be determined by how soon your shoulder recovers, not by how many days or weeks it has been since your injury occurred. You may safely return to your sport or activity when:

- Your injured shoulder has full range of motion without pain.
- Your injured shoulder has regained normal strength compared to the uninjured shoulder.

In throwing sports, you must gradually build your tolerance to throwing. This means you should start with gentle tossing and gradually throw harder. In contact sports, your shoulder must not be tender to touch and contact should progress from minimal contact to harder contact.

What can I do to help prevent recurring shoulder separation?

Exercise and lift weights under the supervision of a trainer or physical therapist to strengthen your shoulders muscles.

Muscle-strengthening exercises will also help strengthen your ligaments and tendons. If you have symptoms, you should avoid activities that aggravate your pain, use ice packs, and take anti-inflammatory medication if needed.

Shoulder Separation Rehabilitation Exercises

PHASE I

1. Wand exercises

A. Shoulder flexion: Stand upright and hold a stick in both hands. Stretch your arms by lifting them over your head, keeping your elbows straight. Hold for 5 seconds and return to the starting position. Repeat 10 times.

B. Shoulder abduction and adduction: Stand upright and hold onto a stick with both hands. Rest the stick against the front of your thighs. While keeping your elbows straight, use your uninjured arm to push your injured arm out to the side and up as high as possible. Hold for 5 seconds and return to the starting position. Repeat 10 times

C. Horizontal abduction and adduction: Stand upright and hold a stick in both hands. Place your arms straight out in front of you at shoulder level. Keep your arms straight and swing the stick to one side, feel the stretch, and hold for 5 seconds. Then swing the stick to the other side, feel the stretch, and hold for 5 seconds. Repeat 10 times.

D. Shoulder extension: Stand upright holding a stick in both hands behind your back. Move the stick away from your back, keeping your elbows straight. Hold the end position for 5 seconds then relax and return to the starting position. Repeat 10 times

E. Internal rotation: Stand upright holding a stick in both hands behind your back. Move the stick up and down your back by bending your elbows. Hold the bent position for 5 seconds and then return to the starting position. Repeat 10 times

F. External rotation: Laying on your back, hold a stick with both hands, palms up. Your upper arms should be resting on the floor, your elbows at your side and bent 90 degrees. Using your good arm, push your injured arm out away from your body while keeping your injured elbow at your side. Hold the stretch for 5 seconds. Return to the starting position. Repeat 10 times.

2. Active shoulder range of motion

A. Flexion: Stand with your arms hanging straight down by your side. Lift both arms, thumbs up, over your head. Hold for 5 seconds. Return to the starting position. Repeat 10 times.

B. Shoulder abduction and adduction: Stand with your arms at your sides. Bring your arms up, out to the side, and toward the ceiling. Hold for 5 seconds. Return to the starting position. Repeat 10 times.

C. Horizontal abduction and adduction: Stand with your arms held straight out in front of you at shoulder level. Pull your arms apart and out to the sides as far as possible. Hold them back for 5 seconds, then bring them back together in front of you. Repeat 10 times. Remember to keep your arms at shoulder level throughout this exercise.

D. Shoulder extension: Standing, move your involved arm back, keeping your elbow straight. Hold this position for 5 seconds. Return to the starting position and repeat 10 times.

E. Scapular range of motion: Shrug your shoulders up. Then squeeze your shoulder blades back and down, making a circle with your shoulders. Return to the starting position. Hold each position 5 seconds and do the entire exercise 10 times.

PHASE II

1. Sidelying horizontal abduction: Lie on your uninjured side with your arm relaxed across your chest. Slowly bring your uninjured arm up off the floor, elbow straight, so that your hand is pointing towards the ceiling. Repeat 10 times. Hold a weight in the hand as the exercise becomes easier.

2. Prone shoulder extension: lie on your stomach on a table or a bed with your involved arm hanging down over the edge. With your elbow straight, slowly lift your arm straight back and towards the ceiling. Return to the starting position. Repeat 10 times. As this becomes easier, hold weight in your hand.

3. Biceps curls: Standing, hold a weight of some sort (a soup can or hammer) in your hand. Bend the elbow of your involved arm and bring your hand, palm up, toward your shoulder. Slowly return to the starting position and straighten your elbow. Repeat 10 times.

4. Triceps: lie on your back with your arms toward the ceiling. Bend your involved elbow completely, so that your hand is resting on the shoulder of the same side and your elbow is pointing toward the ceiling. You can use your other hand to help support your upper arm just below the elbow. Then straighten your elbow completely so that your hand is pointing toward the ceiling. Return to the starting position. Repeat 10 times. Hold a weight in your hand when this exercise becomes easy.

5. Abduction: Stand with your injured arm at your side, palm resting against your side. With your elbow straight, lift your hand arm out to the side and toward the ceiling. Hold this position for 5 seconds. Repeat 10 times. Add a weight to your hand as this exercise becomes easier.

6. Shoulder flexion: Stand with your injured arm hanging down at your side. Keeping your elbow straight, bring your arm forward and up toward the ceiling. Hold this position for 5 seconds. Repeat 10 times. As this exercise becomes easier, add a weight.