

# A GUIDE TO BROKEN COLLARBONE (FRACTURED CLAVICLE)

**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 broken collarbone?**

A broken collarbone is a break in the clavicle, the bone in your upper chest that connects your breastbone (sternum) to part of your shoulder blade (scapula). A broken collarbone is also known as a fractured clavicle.

## **How does it occur?**

A broken collarbone can occur in several ways. You may fall on your outstretched arm and hand, you may fall on your shoulder, or you may be hit directly in the collarbone.

## **What are the symptoms?**

You will have pain and swelling at the area of the break. It will be difficult to move your arm or shoulder. You may have heard a crack at the time of injury.

## **How is it diagnosed?**

Your doctor will examine your collarbone and find tenderness and swelling. An x-ray will show a fracture.

## **How is it treated?**

To ease your discomfort, your arm may be placed in a sling. It may take 6 to 12 weeks for your clavicle to heal.

## **When can I return to my sport or activity?**

It is important that the clavicle is fully healed before you return to your sport or activity so your collarbone doesn't break again. You must be able to move your clavicle, shoulder, and arm without pain. Your doctor may take another x-ray to be sure that the bone has healed.

You can begin rehabilitation exercises after your broken collarbone has healed and after you've seen your doctor.

## **How can I prevent a broken clavicle?**

Clavicle fractures are usually the result of accidents that cannot be prevented

## Broken Collarbone 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 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 sides 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 you 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. Side lying horizontal abduction: Lie on your uninjured side with your injured arm relaxed across your chest. Slowly bring your injured arm up off the floor, elbow straight, so that your hand is pointing toward the ceiling. Repeat 10 times. Hold a weight in your hand as the exercise becomes easier.

2. Prone shoulder extension: Lie on your stomach on a table or a bed with your elbow straight, slowly lift your arm straight back and toward the ceiling. Return to the starting position. Repeat 10 times. As this becomes easier, hold a weight in your hand.

3. Bicep 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 the hand on your injured side is resting on the shoulder of that 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.