

# OLECRANON BURSITIS



## ■ ■ ■ Description

A bursa functions like a water balloon to reduce friction and wear of the soft tissues against bone. The olecranon bursa is a bursa between the back of the elbow (olecranon) and the overlying skin. This bursa allows the skin to glide easily and without friction over the back of the elbow. Olecranon bursitis is characterized by inflammation and pain of this bursa.

## ■ ■ ■ Common Signs and Symptoms

- Pain, tenderness, swelling, warmth, or redness over the back of the elbow at the olecranon bursa
- Limited movement in the affected area, occasionally with radiation of pain into adjacent areas
- Occasionally, severe pain with movement of the affected elbow
- Crepitation (a crackling sound) when the bursa is moved or touched
- Often, painless swelling of the bursa
- Fever (when infected)

## ■ ■ ■ Causes

- Usually, sudden direct trauma or to repetitive pressure on the back of the elbow
- Less commonly, overuse or strenuous, unaccustomed exercise of the elbow

## ■ ■ ■ Risk Increases With

- Sports that require bending or landing on the elbow, such as football, especially on artificial turf, or volleyball
- Vigorous or repetitive athletic training or sudden increase or change in activity level (weekend warriors)
- Improper warm-up or overstretching
- Poor technique
- Playing on artificial turf

## ■ ■ ■ Preventive Measures

- Avoid injuries or overuse of muscles whenever possible.
- Appropriately warm up and cool down.
- Maintain appropriate conditioning:
  - Elbow flexibility
  - Muscle strength and endurance
  - Cardiovascular fitness
- Use proper technique and wear protective equipment, including elbow pads.

## ■ ■ ■ Expected Outcome

This condition is usually curable within 2 weeks if treated appropriately with conservative treatment and resting of the affected area.

## ■ ■ ■ Possible Complications

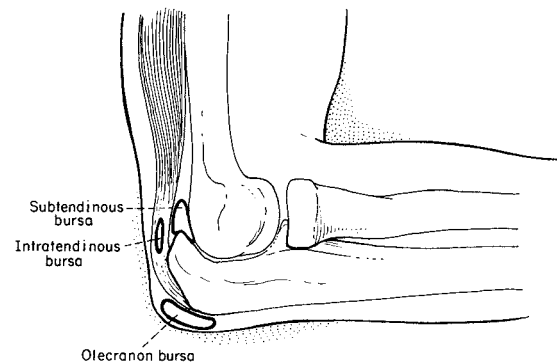
- Prolonged healing time if not appropriately treated or if not given adequate time to heal
- Frequent recurrence of symptoms, resulting in a chronic problem
- Joint stiffness with permanent limitation of the affected joint's mobility
- Infection of bursa
- Chronic inflammation or scarring of bursa

## ■ ■ ■ General Treatment Considerations

Initial treatment occasionally consists of medication and ice to relieve the pain, stretching and strengthening exercises (particularly the biceps and triceps muscles), and modification of the activity that initially caused the problem. Often an elbow pad or brace may be recommended to protect the bursa and to reduce repeated irritation of the bursa while the inflammation settles down. These all can be carried out at home, although referral to a physical therapist or athletic trainer for further evaluation and treatment may be helpful. An elastic bandage may be used to help reduce swelling. If symptoms persist or recur, withdrawing fluid from the bursa, with or without injection of cortisone, may be needed. Bursae that persist despite conservative treatment, recurrent bursae, and infected bursae may require surgical excision (removal).

## ■ ■ ■ 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 occasionally 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 are usually not prescribed for this condition. If your physician does prescribe pain medications, use only as directed and only as much as you need.



**Figure 1**

From Morrey BF: *The Elbow and Its Disorders*. Philadelphia, WB Saunders, 1993, p. 875.

- Cortisone injections into the bursa reduce inflammation and may be administered, although this is not usually recommended as a means to return to sports.
- Antibiotics may be prescribed if the bursa is infected or to prevent infection after surgery.

### ■ ■ ■ 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

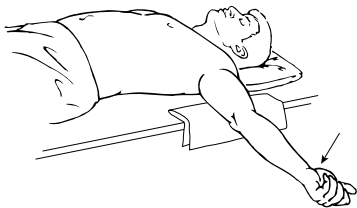
- Symptoms get worse or do not improve in 2 weeks despite treatment
- Signs of infection develop, including fever of 101°F, increased pain, redness, warmth, or purulent drainage from the bursa
- New, unexplained symptoms develop (drugs used in treatment may produce side effects)

## EXERCISES

### ➤ RANGE OF MOTION AND STRETCHING EXERCISES • Olecranon Bursitis

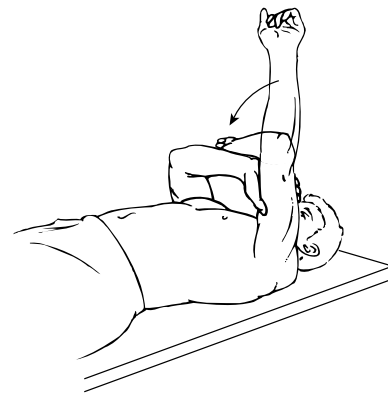
These are some of the *initial* exercises you may start your rehabilitation program with until you see your physician, physical therapist, or athletic trainer again or until your symptoms are resolved. Please remember:

- 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.



### RANGE OF MOTION • Extension

1. Lie on your back and rest your elbow off the edge of the bed as shown. You may also sit at a table with the upper arm supported in a similar manner.
2. Let the gravity weight of your hand, wrist, and lower arm straighten your elbow until you feel a slight stretch.
3. You may hold a small weight in your hand or wear a weight around your wrist (\_\_\_\_ lbs.) if approved by your physician, physical therapist, or athletic trainer to help stretch farther.
4. Hold this position for \_\_\_\_ seconds and then *slowly* return to the starting position.
5. Repeat exercise \_\_\_\_ times, \_\_\_\_ times per day.



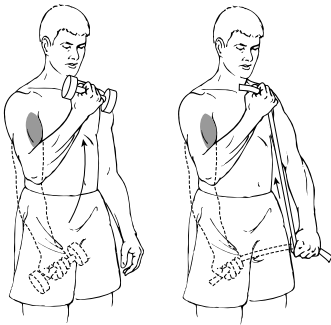
### RANGE OF MOTION • Flexion

1. Lie on your back with your \_\_\_\_ arm straight up in the air. Support your arm with the other hand as shown.
2. Let the gravity weight of your hand, wrist, and lower arm bend your elbow until you feel a slight stretch.
3. You may hold a small weight in your hand or wear a weight around your wrist (\_\_\_\_ lbs.) if approved by your physician, physical therapist, or athletic trainer to help stretch farther.
4. Hold this position for \_\_\_\_ seconds and then *slowly* return to the starting position.
5. Repeat exercise \_\_\_\_ times, \_\_\_\_ times per day.

> **STRENGTHENING EXERCISES** • Olecranon Bursitis

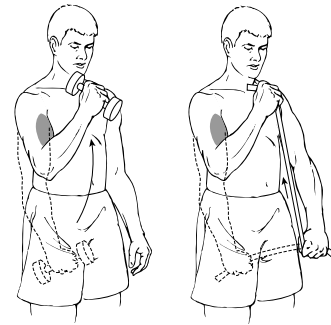
These are some of the *initial* exercises you may start your rehabilitation program with until you see your physician, physical therapist, or athletic trainer again or until your symptoms are resolved. Please remember:

- 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.



**STRENGTH** • Elbow Flexion

1. Stand with your arm straight and your *palm* facing forward.
2. Bend the elbow as shown using a \_\_\_\_\_ pound weight or rubber band/tubing as shown.
3. Hold this position for \_\_\_\_\_ seconds and then *slowly* return to the starting position.
4. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.



**STRENGTH** • Elbow Flexion

1. Stand with your arm straight and your *thumb* facing forward.
2. Bend the elbow as shown using a \_\_\_\_\_ pound weight or rubber band/tubing as shown.
3. Hold this position for \_\_\_\_\_ seconds and then *slowly* return to the starting position.
4. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.

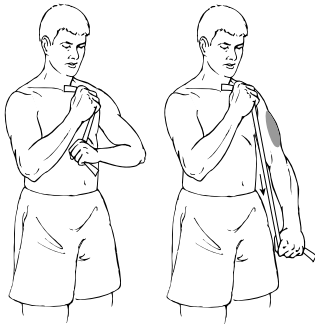


**STRENGTH** • Elbow Flexion, Isometric

1. With your involved/injured arm on the bottom and the palm of that hand facing upward, assume the position shown.
2. While resisting with the top hand, try to bend the elbow of your involved/injured arm.
3. Do not allow your elbow to move.
4. Hold this position for \_\_\_\_\_ seconds, then relax.
5. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.

**STRENGTH • Elbow Extension**

1. Lie on your back with your \_\_\_\_\_ elbow bent and pointing directly at the ceiling as shown. (You may also do this exercise standing with the arm pointed overhead.)
2. Hold a \_\_\_\_\_ pound weight in your hand.
3. Straighten the elbow.
4. Hold this position for \_\_\_\_\_ seconds and then *slowly* return to the starting position.
5. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.

**STRENGTH • Elbow Extension**

1. Hold the rubber band/tubing with your \_\_\_\_\_ hand on the bottom as shown.
2. Straighten out your elbow, stretching the rubber band/tubing for resistance.
3. Hold this position for \_\_\_\_\_ seconds and then *slowly* return to the starting position.
4. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.

**STRENGTH • Elbow Extension, Isometric**

1. With your involved/injured arm on top and the palm of your hand facing you, assume the position shown.
2. While resisting with the bottom hand, try to straighten the elbow of your involved/injured arm.
3. Do not allow your elbow to move.
4. Hold this position for \_\_\_\_\_ seconds, then relax.
5. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.

Notes:

(Up to 4400 characters only)

Notes and suggestions