

## ***OS ACROMIONALE***

### **DESCRIPTION**

The roof of the shoulder (the acromion) has 3 growth centers made of cartilage. During development, these growth centers become bone, such that the roof of the shoulder transforms from 4 separate bones into one bigger bone. Occasionally, one or more of these growth centers does not undergo bony change. This persistent growth center of the roof of the shoulder is called Os Acromionale. This cartilage growth plate allows for some motion of the acromion which may pinch the rotator cuff tendon(s) and/or bursa causing symptoms of rotator cuff inflammation. Alternatively, this entity may not cause any pain or problems.

### **FREQUENT SIGNS AND SYMPTOMS**

- Sometimes there is no pain with this problem and it is found when x-rays are taken for other reasons.
- Tenderness and, occasionally, redness and warmth on the top of the shoulder
- Shoulder pain, especially when moving the shoulder against resistance or with lifting, and particularly reaching overhead
- Pain that may awaken you at night
- Limitation of shoulder motion
- Crepitation (a crackling sound) when the shoulder is moved

### **CAUSES**

Growth center of the acromion that fails to undergo bony change. This allows for motion of the acromion that may pinch the rotator cuff and bursa causing inflammation, degeneration and eventual tear of the cuff.

### **RISK INCREASE WITH**

- Unknown cause of the growth plate not fusing.
- Symptoms more likely with overhead activity, including sports that require overhead activity - tennis, volleyball, swimming and baseball - and heavy lifting.

### **EXPECTED OUTCOME**

Mild cases can be resolved with slight reduction of activity level, while moderate to severe cases may require significantly reduced activity for 3 to 4 months. Occasionally surgery is necessary.

### **POSSIBLE COMPLICATIONS**

- Persistence and recurrence of symptoms
- Rotator cuff tear
- Risks of surgery including infection, bleeding, injury to nerves, shoulder stiffness, non-union (not healing), mal-union (heal incorrectly), pain from wires or screws used to fix the problem
- Persisting prominence (bump) on the roof of the shoulder.

## **GENERAL TREATMENT CONSIDERATIONS**

Initial treatment consists of medications and ice to relieve pain, stretching and strengthening exercises (particularly of the rotator cuff and scapular {shoulder blade} stabilizing muscles) and modification of activities. Specifically, avoiding overhead activities and heavy lifting will help reduce the inflammation. The exercises for the shoulder can all be carried out at home. Referral to a physical therapist or athletic trainer for further evaluation or treatment may also be recommended.

Uncommonly, injection of cortisone into the subacromial bursa may be attempted. Surgery to fuse the growth plate, or to remove part of the bone if it is particularly small, is recommended if symptoms persist despite 3 - 6 months of conservative treatment. Surgery to fuse the growth plate usually involves pins, screws and/or wires to hold the bone, often with bone grafting. If the rotator cuff is torn, this should be fixed at the same time.

## **MEDICATION**

- Non-steroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take if surgery planned in 7 days or less), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact him/her immediately if any bleeding, stomach upset or an allergic reaction occurs.
- Pain relievers are usually not prescribed for this condition though your physician may prescribe these following surgery. Use only as directed and only as much as you need.
- Cortisone injections into the bursa reduce inflammation, and may be administered, though this is not usually recommended.

## **COLD THERAPY:**

Cold is used to relieve pain and reduce inflammation. Cold should be applied for 10-15 minutes every 2-3 hours for inflammation and pain, and immediately after any activity which aggravates your symptoms. Use ice packs or an ice massage.

## **NOTIFY OUR OFFICE IF:**

- Symptoms get worse or do not improve in 2-4 weeks, despite treatment
- After surgery you develop increasing pain, swelling, redness, increased warmth, bleeding or drainage, and/or fevers.
- New, unexplained symptoms develop. Drugs used in treatment may produce side-effects.