

BIO475L Study Sheet: Shoulder Bursitis

Group Members: Ashley Bremar, Sahil Rajan, Veronica West, and Claire Feller

Shoulder bursitis is a painful condition caused by inflammation and swelling of the bursa in the shoulder. It can occur due to frequent, repetitive motions at the shoulder. Bursae help to protect and cushion parts of the body that would rub together to produce friction and are located at various joints in the body. Bursae are filled with fluid and act as a protective barrier between hard bone and soft tissue. This condition is diagnosed by physical examination, X-rays, and ultrasound scanning. Common symptoms include tenderness, redness, and stiffness in the shoulder.

In this model, the bursa in the shoulder we are referencing is termed the subacromial bursa. It is the round clay structure lying anteriorly and laterally to the humerus and glenohumeral joint and inferiorly to the clavicle, acromion of the scapula, and the spinal part of the left deltoid muscle. The left supraspinatus muscle runs medially and inferiorly to the bursa. Our model also includes the left superior subscapular nerve, which innervates the subscapularis muscle. Upon damage to this nerve, medial rotation of the shoulder is limited.

The swelling and irritation of the subacromial bursa often occurs due to repeated, minor traumas. The subacromial bursa helps to reduce friction between the acromion of the scapula and the supraspinatus muscle. When you elevate your arm laterally, however, the bursa rolls beneath the acromion and can get pinched. When this action occurs repeatedly, the bursa can become swollen and painful, causing bursitis. If left untreated, shoulder bursitis can lead to calcium deposits, which further restrict shoulder movement.

Some treatments that could help treat shoulder bursitis include:

- Rest: rest could help shoulder bursitis from getting worse, as less shoulder movement can prevent the bursa from getting more irritated.
- Ice: if the injury is within 5 days, ice packs could help shoulder bursitis from swelling and reduce the pain.
- Anti-inflammatories: anti-inflammatories like ibuprofen and aspirin could help with the swelling and discomfort and can reduce the pain for a certain time.
- Physical therapy: can be used to strengthen the muscles surrounding the bursa
- Aspiration of fluid: a needle and syringe can be used to aspirate some of the fluid from the bursa in order to relieve some of the pressure
- Surgery: if shoulder bursitis does not improve with these treatments and persists long-term, then surgery would be the best option as it could reduce the pressure in the bursa and eventually repair the damage.

Sources:

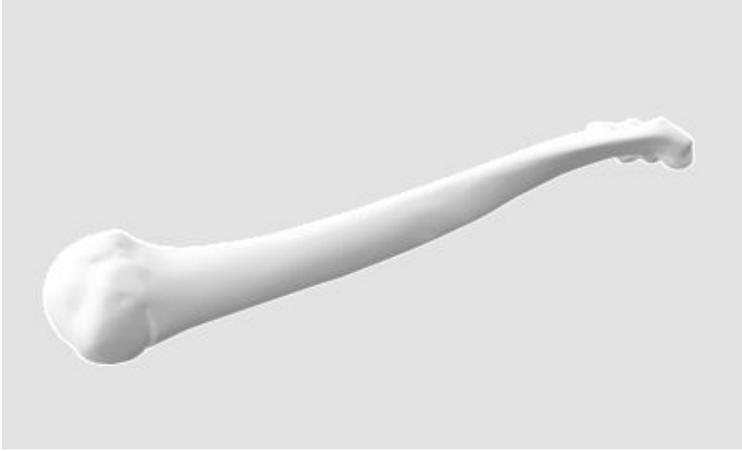
- <https://www.medicalnewstoday.com/articles/320495#treatment>
- <https://www.southerncross.co.nz/group/medical-library/bursitis-causes-symptoms-treatment>
- [Bursitis_shoulder](#)



Left superior subscapular nerve



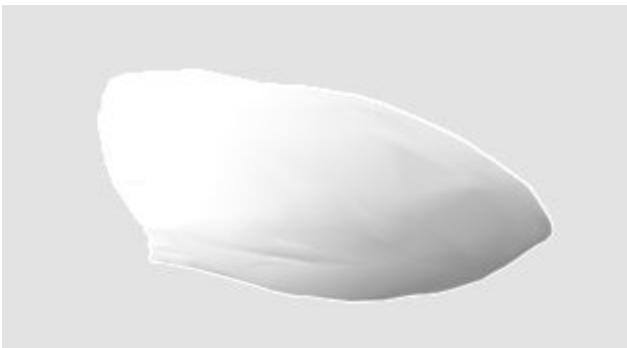
left scapula



Left humerus



left clavicle



spinal part of left deltoid



left supraspinatus