

What Is That Snapping and Grinding Under My Shoulder Blade?

Physical Therapy in San Jose, Los Gatos, Foster City and Burlingame for Shoulder

Do you suffer from painful snapping of your shoulder blade, when you move your arm? This article discusses some of the causes of shoulder blade snapping or bursitis of the the shoulder blade. A Physical Therapist at MORE Physical Therapy in San Jose, Los Gatos, Foster City and Burlingame can examine your shoulder and may be able to help you with the relief of pain from shoulder girdle bursitis. Although most clients can benefit from conservative treatment from a Physical Therapist, occasionally surgery is indicated to remedy the problem.

You wouldn't know it without being told, but raising the arm overhead requires complex coordinated interactions of the clavicle (collar bone), glenohumeral (shoulder) joint, and scapula. The entire scapulohumeral structure is held together by muscles, tendons, and ligaments. Protective pads called bursa (bursae when referring to more than one) make it possible for smooth, gliding movements of all the parts.

Sometimes people (especially athletes) develop grinding, snapping, crunching, or popping called crepitus that can be felt by the affected person and even heard by others. When crepitus affects the scapula as it moves over the rib cage (thorax), it is referred to as scapulothoracic crepitus or snapping scapula.

That's the focus of this review article. The authors discuss what happens to normal anatomy to cause this problem, how it differs from another condition called scapulothoracic bursitis, and how to treat both conditions. Fortunately, these problems are fairly uncommon. But when they do occur, the pain and loss of normal movement can result in severe dysfunction of the shoulder and arm. And for anyone involved in overhead throwing sports, the symptoms can be extremely limiting.

What causes scapulothoracic bursitis or crepitus? Normal variations in the shape, size, and position of the scapula can cause muscle and tendon to rub the wrong way. There are those protective pads (bursae) to help ease the tension between muscle and bone or even muscle and muscle. But if there's a bony bump on the scapula or an extra long end of the bone, the extra wear and tear of muscle/tendon flipping back and forth over the prominence can result in crepitus.

Now, crepitus isn't always a problem. It turns out that one-third of all adults notice some snapping, grinding, or popping as they move their arm. It never results in painful symptoms or loss of function. What we are talking about here are those people who either suffer some injury to the arm (trauma) or overuse the arm (repetitive irritation of the bursa). Either one can cause inflammation of the bursa (bursitis) and eventually crepitus from scarring and fibrosis.

In a smaller number of people, there are other potential causes of scapulothoracic bursitis and crepitus besides trauma and overuse. For example, bone tumors or bone spurs may result in a reactive bursa. A bursa forms where no bursa normally exists. Muscle tears, muscle atrophy, structural spinal deformities like scoliosis (curvature of the spine), and rib or scapula fractures that don't heal properly can also create these types of problems.

Whatever the cause, what can be done to fix the problem? Well, first an examination should be done to find out exactly what's going on. How is the scapula moving over the thorax? Are there obvious alterations in the normal movement patterns and biomechanics? What muscles are too tight, too loose, or weak? Are there any changes in the person's posture that might be contributing to the problem?

Clinical testing of motion, mobility, and strength along with imaging studies and possibly electrodiagnostic tests help confirm the diagnosis. The examiner, whether an orthopedic surgeon, sports physician, or Physical Therapist, will also check to see if the symptoms are really coming from the cervical spine (neck).

Once all the information has been collected, a program of nonoperative rehab is the first step. The Physical Therapist works with the patient to restore normal posture, scapular movement, strength, and endurance. It can take up to six months to create the form and function needed to a return to normal scapulothoracic and scapulohumeral motion. In some cases, the bursa is injected with a steroid to reduce swelling and irritation from the inflammatory process.

When conservative (nonoperative) care doesn't solve the problem, then the surgeon gives some thought to operating. The inflamed bursae may be removed or alternately, a portion of the scapula may be cut out. Either one of these procedures takes pressure off the soft tissues that are getting pinched or rubbed against.

Some of these surgeries can be done arthroscopically, while others require open incision. The exact surgical method and technique to use for a snapping scapula that doesn't respond to conservative care isn't known. In fact, there's a lot of debate over this issue.

Studies that have been done so far show equally good results no matter what surgical approach is taken. Success is defined by a pain free return to preinjury activity levels at work and in sports or recreational activities. Patients who choose surgery should be warned that there are a few potential complications such as recurrence of the same pesky bursitis and/or damage to the dorsal scapular nerve.

Reference: Augustine H. Conduah, MD, et al. Clinical Management of Scapulothoracic Bursitis and the Snapping Scapula. In Sports Health. March/April 2010. Vol. 2. No. 2. Pp. 147-155.