

Ruth's shoulder trouble came about in a very different way. At age sixty-seven, she had decided to pursue her lifelong dream of learning to play the banjo. But soon after her first lessons, she began having pain behind her left shoulder whenever she sat down to practice. It hurt just to stick her arm out to hold the neck of the instrument. Luckily, her teacher knew something about trigger points, having had problems of his own. He explained that the position of the left hand when playing a banjo, guitar, or even a violin requires maximum outward rotation of the left arm. To permit this, the subscapularis muscle has to lengthen all the way, which can be a terrific strain if you try to practice too long and the muscle isn't strong and resilient. "And then you get trigger points," he told her. After he showed her how to do self-applied subscapularis massage, Ruth was able to continue playing her banjo, pain free, as long as she didn't overdo it.

Symptoms

The main symptom of subscapularis trigger points is severe pain deep in the back of the shoulder (figure 5.30). An ache in the back of the wrist is occasionally present and could be seen as a signature of subscapularis trigger points. Sometimes the shoulder pain extends down the back of the upper arm (not shown). You may also have an extremely tender spot on the front of your shoulder where the troubled subscapularis has been continuously pulling and jerking on its attachment to the humerus (Simons, Travell, and Simons 1999).

The pull of the four rotator cuff muscles must be in balance in order for the shoulder joint to operate smoothly and freely. A subscapularis muscle weakened by trigger points allows the supraspinatus to pull up on the head of the humerus unopposed, jamming it against the acromion. A clicking or popping noise when you move your shoulder indicates probable trigger points in the subscapularis or the supraspinatus, or both (Simons, Travell, and Simons 1999; Lippitt and Matsen 1993).

Subscapularis trigger points also keep the muscle from lengthening, reducing the shoulder's range of motion and restricting rotation of the arm in either direction. This makes it difficult to reach above your head, across your body, or up behind your back. The disabling pain and stiffness caused by subscapularis trigger points are commonly mistaken for bursitis, arthritis, bicipital tendinitis, rotator cuff injury, and adhesive capsulitis (Simons, Travell, and Simons 1999).

Causes

A sudden unprepared overloading of the shoulder muscles, such as might occur during a fall, is especially likely to make trouble for the subscapularis. Your shoulders are more vulnerable to this kind of accident when you're an older person, overweight, or simply out of shape. Another common cause for the development of subscapularis trigger points is prolonged immobilization of the shoulder for healing of a broken arm. Stroke victims who have lost the use of an arm often develop subscapularis trigger points because of inactivity. Recovering from a tear to the rotator cuff can make trigger points in the subscapularis, as can the initial injury. Dislocating the shoulder can also cause trigger points (Simons, Travell, and Simons 1999).

Trigger points commonly develop in the subscapularis when you overexert yourself during exercise or sports activity without proper conditioning. Lifting a child overhead and then swinging her down between your legs and up again will activate subscapularis trigger points. Fitness enthusiasts, swimmers, tennis players, and ball throwers of all kinds are in special danger of abusing their subscapularis muscles. Pitchers who have to retire prematurely because of chronic shoulder pain might well be able to return to the mound if their subscapularis and other shoulder muscles were given some trigger point therapy (Simons, Travell, and Simons 1999).

Treatment

The easiest technique for gaining maximum access to the subscapularis is to sit with the bad arm hanging down between your legs (figure 5.31). Rest your forehead on a table with a folded towel as a pad. This position

relaxes the shoulder muscles and brings the shoulder blade forward and around the body especially if the arm is held loosely down in between the legs. With the palm surface of your fingers firmly against your ribs, push deep into the slot between the ribs and the armpit. If your hand and fingers are tight against your ribs, the fingertips will press right into the subscapularis. Search for exquisitely tender spots deep in the pocket between the ribs and the roll of muscle that defines the back of the armpit. You won't be pinching this roll of muscle or pressing into it; rather seek the deep valley of the armpit itself. For the uppermost trigger points, search very high in the armpit and aim up at the joint itself. When you find a trigger point, treat it with slow, short strokes pressing up toward the ceiling then outwards against the shoulder blade. Travel down the entire length of the muscle. There will be four to five inches, from top to bottom, to search and treat. Don't overlook points near the bottom end of the shoulder blade as you approach its inferior angle.

Try using your thumb for this technique; you may like it better. As you learn forward, place the elbow of your treatment hand on your knee. This will provide better leverage. Periodically, relax the side you are working on, as it will have a tendency to tighten up in defense. Keep your arm down, hanging loosely in between your legs. If you're unsure whether you're touching the subscapularis, contract it by strongly rotating your arm inward. Inward rotation is when your elbow is turned outward. This technique was the primary therapy my father used to treat his own frozen shoulder, as described in chapter 1. Although many other muscles were involved, the subscapularis was the heart of the problem. Give subscapularis trigger points ten to twelve strokes several times a day. If pain wakes you up in the night, have another massage session; it should cut the pain enough to let you get back to sleep. Don't overdo it; the armpit can get quite sore.

Continue daily massage until you can no longer find trigger points. Significant relief can come right away, but complete deactivation may take as long as six weeks. Trigger points that have been in place for months or years will require a great deal of attention. Because they are usually soft, you probably won't be aware of the clusters of lymph nodes here; however, if you feel a firm bump larger than a pinto bean that does not go away in a couple of days, it is wise to have it checked out by a doctor. See the section "Contraindications: Reasons to Be Cautious" in chapter 3 for more details about lymph nodes. You'll quickly discover that long fingernails will keep you from effectively self-treating your subscapularis muscles. Fingernails grow back. Make the sacrifice.

For many people, this self-treatment technique will be either too taxing or simply impossible when obstructed by a broad chest. A gentle, conscientious partner can often be of immense help. Before working on someone else's subscapularis, rehearse the technique on yourself; it will make you more compassionate. If a partner is not a viable option for you, purchase a simple, inexpensive massage tool called the Shemala Fingers from www.bodytools.com. They are a weird little pair of rubber fingers, and the smaller one is invaluable for massaging the subscapularis.



Figure 5.31 Subscapularis massage with arm hanging down between legs

Deltoid

The *deltoid* muscle, if flattened out on a table, would resemble the Greek letter delta, which has the shape of a triangle. On the body, the deltoid muscle completely surrounds the shoulder like a cap. Although the deltoid is technically a single muscle, it has many heads, or sections, that are commonly categorized into three parts: the anterior, posterior, and middle deltoid, on the front, back, and outer side of the shoulder, respectively. Because of this, the deltoid muscle is often spoken of as “the deltoids.”

The deltoids attach to the collarbone, scapular spine, and acromion, the bony point of the shoulder. Their lower attachment is to a slight bump about halfway down the outer side of the humerus. In conjunction with the supraspinatus muscle, the function of the deltoids is to raise the arm in any direction—front, back, and sideways.