

## **Massage Therapy Helps Shoulder Pain**

*By Susan Jackson Grubb NCMT, CNMT*

Each year, around four million people in the United States seek medical care for pain related to shoulder sprains, strains, dislocations, or other problems, according to the National Institute of Arthritis and Musculoskeletal and Skin Diseases

The most frequently heard medical explanations for shoulder pain include arthritis, degenerative disease, under-use, over-use, aging, bursitis, tendonitis, rotator cuff injury, adhesive capsulitis, and loss of joint cartilage. X-rays, CAT scans, MRI's and other tests often seem to substantiate such diagnoses. As a result, exploratory surgery, forced mobilization, and even replacement surgery for shoulder joints are commonplace.

### **An Opposing View**

In opposition to conventional medical practices, doctors Janet Travell and David Simons in their widely acclaimed medical textbook, **Myofascial Pain and Dysfunction: The Trigger Point Manual**, state that myofascial trigger points (tiny knots of contraction) in overworked or traumatized muscles are actually the most frequent cause of pain and loss of mobility in the shoulder.

Travell and Simons believe that even when a shoulder joint has suffered an actual injury, trigger points always contribute a major part of the pain. Pain referred from trigger

points can be every bit as intense and debilitating as pain from a damaged joint, they stress.

### **Frozen Shoulder**

The most frequent causes of shoulder pain are trigger points in the four rotator cuff muscles that cover the front and back of the shoulder blade and cause the shoulder to rotate (Subscapularis, Teres Minor, Infraspinatus, and Supraspinatus). Unlike the knee, a joint that only moves forward and back, the ball and socket joint of the shoulder is constructed to move in many directions. Certain types of movements can cause these muscles to become particularly tense.

There are up to twenty muscles are involved in operating the shoulder and all of them are vulnerable to strain. When a shoulder muscle is made dysfunctional by trigger points, other muscles have to compensate. Under the extra burden, each muscle acquires trigger points in turn, until every muscle in the region is in trouble. It often also involves pain on that side in the neck, chest, upper arm, and back. This can lead to progressively limited movement of the arm, ending in a frozen shoulder.

### **Stiff Muscles**

Travell and Simons quote other researchers who believe that trigger points may actually be the root cause of true osteoarthritis and other kinds of joint deterioration. This is because muscles afflicted with trigger points become shortened and stiff. When this happens, even normal movement puts undue strain on muscle attachments at the joints,

which can eventually result in damage to connective tissue and distortion of the joints themselves. Popping in a shoulder joint is evidence that muscles afflicted with trigger points are straining and partially disarticulating the joint.

### **Trigger Point Therapy**

Following the first 48 hours or as soon as pain permits, ischemic pressure may be applied to the trigger points in this area. Pressure on the trigger point stops blood from flowing into the affected area making it ischemic (deprived of oxygen). The person should feel a 'comfortable pain' as if pressure is being released. After 8 to 20 seconds the pressure is released and the circulation of blood, oxygen and nutrients to the area increases. In addition, it is important to apply general massage to the surrounding muscles of the shoulder. This helps keep the shoulder functioning correctly and speeds up the rehabilitation process. Cold therapy or ice following treatment is recommended.

### **Cross Fiber Friction**

As the injury becomes less painful, ischemic pressure can progress to cross fiber friction. This technique helps encourage the body to lay down connective tissue in the same direction as the originally damaged tissue. The proper alignment causes smaller amounts of connective tissue to be needed and allows for a fuller range of motion upon recovery.

People can take steps to reduce shoulder pain, such as using good posture and ensuring that repetitive, job-related tasks do not lead to injuries. However, exercising and stretching a bad shoulder can also make trigger points worse and, in turn, worsen the

pain. Trigger points are designed to protect stressed muscles from further abuse, which has often occurred in the form of overstretching in the first place. With shoulder muscles in particular, stretching and exercising should not be done until all trigger points have been deactivated.

## **Research**

Soft-tissue massage improved range of motion, reduced pain and improved function in people with shoulder pain, according to a research study conducted by the staff at Auburn Hospital and Concord Repatriation General Hospital in Sydney, Australia.

Twenty-nine subjects who had been referred to the Concord hospital for management of shoulder pain participated in the study. Their medical diagnoses varied, but impingement, rotator cuff tear, and unspecified shoulder pain were the most common diagnoses.

About half of the participants received no treatment for two weeks. The other half were randomly assigned to the massage group, where they received six 15 – 20 minute sessions of soft-tissue massage around the shoulder for two weeks.

Active range of motion was evaluated for flexion, abduction and hand-behind-back movements before and after the study. Pain was assessed on the Short Form McGill Pain Questionnaire, and functional ability was assessed with the Patient Specific Functional Disability Measure, both before and after the study period.

Subjects in the control group showed no significant improvements from the beginning to the end of the two-week period. Subjects in the massage group showed significant improvements in all measures, with a mean improvement of 22.6 degrees in flexion; 42.2 degrees in abduction; and the ability to reach a mean of 11 centimeters further up the back. Subjects in the massage group also reported decreased pain and improved function.

“The fact that these patients improved with such a wide range of diagnoses points to the potential generalisability of the effects of this massage in patients with shoulder pain of local mechanical origin” wrote the authors.

### **Self Treatment**

Treatment for shoulder pain varies according to the type and severity of the injury. If shoulder pain is minor, home-based treatments, such as icing, over-the-counter medications or stretching exercises are beneficial.

Self-massage can also help. Just feel around the shoulder area until you feel a “knot” or area of pain. Hold it with moderate pressure for 10 seconds, and then gently massage the area in a circular pattern. Clair Davies in his book **The Trigger Point Therapy Workbook** has simplified Travell and Simon’s extensive research on myofascial pain and made it understandable to the layman. His innovative methods of self-applied trigger point massage will relieve shoulder pain and frozen shoulder when trigger points are the cause.

*About the Author:*

Susan Jackson Grubb, President of Center for Neuromuscular Massage Therapy, Inc. in the Cherry Creek area of Denver is a graduate of the Boulder College of Massage Therapy and has been a massage therapist since 1984. All nine therapists at the center are graduates of massage therapy schools -- each with twice the state requirement for training, are nationally certified, are licensed with the City and County of Denver, and are members of the American Massage Therapy Association. For more information visit [www.cnmtmassage.com](http://www.cnmtmassage.com)