

## SET TALK

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### DESIGNING A PROTOCOL FOR TREATING FROZEN SHOULDERS

Jerry, a 53-year-old licensed massage therapist, called and set up an appointment for a shoulder problem. He reported that he had been doing massage for 15 years working between two offices. This necessitated transferring his table from one office to another on a daily basis. Three years ago he purchased a regular car with a trunk large enough to hold his table which replaced the SUV's he had been driving for the previous years of his practice. For a year he had been having difficulty picking up the table out of the car trunk. In the last month not only did he have trouble picking up the table, but he couldn't abduct his arm more than 10 degrees. In addition, his arm was waking him up at night with his shoulder throbbing in pain.

Gina, a 21-year-old college student, called me to set up an appointment after an auto accident in which she had been rear ended and diagnosed with a cervical flexion/extension injury (whiplash). After three weeks she was also having low back pain and difficulty raising her arm. When I evaluated her she had 70% loss of range of motion in her arm and shoulder. She expressed concern that the insurance company would not cover the shoulder and arm problem because it had not been x-rayed at the time of the accident, and her insurance agent said that the arm problem was probably not related to the accident or she would have been in immediate pain.

Tom, a 37-year-old accountant/soft ball player, set up a session for his very painful shoulder. He had started the spring season after a three month lay off from soft ball, and after two games could not throw or bat. In addition, a chiropractor had told him he now had a frozen shoulder. Fortunately, the chiropractor recommended that he receive massage therapy for the arm and shoulder in conjunction with the chiropractic adjustments. Upon evaluation, his shoulder was inflamed, and he had approximately a 10% range of motion.

All of the above mentioned clients had a significant limited range of motion, which is called a frozen shoulder. However, each one had a different degree of limitation and each was brought on by a different set of circumstances. Jerry, the massage therapist, had initiated his problem lifting a massage table out of a trunk, and continued to repeat the motion after the problem had started to develop. Gina had an auto accident causing a cervical flexion/extension injury as well as an increased

structural collapse which resulted in an internally rotated right shoulder, but it was only after using her arm in daily life activities that a problem showed up. This was due to the weakness inherent in the arm and shoulder when the shoulder is in internal rotation. Tom's shoulder problem was brought on by over activity on an unconditioned arm while throwing the soft ball from center field. This resulted in straining and irritating the shoulder until it became dysfunctional and inflamed.

In order to be able to effectively treat all of the above clients, it was necessary to evaluate the structural distortion that each client had, and to determine whether the shoulder was internally rotated. I found that all three had a significant internal rotation of their problem shoulders. This in essence left not only the shoulder, but the entire arm, severely weakened and susceptible to strain and injury with light activities. These clients had used their arms with a decrease of at least 50% of normal strength due to the strain pattern, and consequently had damaged soft tissue. As the tissue damage was worsening through regular activities, the inflammation and swelling was also increasing. This ultimately led to their frozen shoulder conditions.

It was apparent that the internal rotation of the shoulders in these three clients had to be addressed in order to effectively treat and rehabilitate their frozen shoulders. This required evaluating what muscle tension and myofascial holding pattern were responsible for the internal rotation of the shoulders. The obvious culprits were the pectoralis groups along with serratus anterior and subscapularis. Palpation showed that all of these muscle groups were very tight and rigid with very active trigger points. In addition, the fascia associated with these muscle groups was tightened and fibrous indicating that splinting was taking place further limiting the range of motion of the shoulder. The splinting had become part of the cause of the frozen shoulder by reinforcing and limiting the range of motion.

There was other not so obvious soft tissue that was also involved. This soft tissue was located on the inside of the upper arm and included the biceps brachii, coracobrachialis, and anterior deltoid fibers. As with the pectoralis groups these tissues were tightened, shortened, and inflamed. The fascia associated with these muscles was also contributing to the frozen shoulder by being rigid, fibrous and shortened.

At this point, it was also necessary to view the relationship of the forearm to the upper arm and the pronation of the hand as contributors to the internal rotation of the shoulder. It was obvious that the entire arm down to the pronated hand were all either supporting or helping to cause the internal rotation of the

shoulder. In addition, upon kinesiological testing the strain pattern that existed in the shoulder manifested all the way through the hand. The muscles of the forearm and the hand were also contracted and in a strain pattern with inflammation and weakness. The clients were not aware of what had been happening in their arms or hands because the most severe pain was in the shoulder. The muscles used in pronation were the ones I found that were the shortest and most distressed. The fascia was similar to what I had found in the shoulder and upper arm. It was fibrous and shortened, and splinting was found even in the hand and forearm which contributed to the limited range of motion of the shoulder.

After addressing the specific musculature involved with the frozen shoulders, it was now important to bring the rest of the body into structural balance to support the remobilization and rehabilitation of the shoulder. Each client had fallen into a structural collapse through different life activities, yet this collapse appeared to be the major player in the development of their frozen shoulders due to the internal rotation of the shoulders.

Now for the therapeutic challenges. All three clients had swelling and inflammation in the tissue that needed to be treated to rehabilitate the shoulder. This swelling and inflammation were two of the principle reasons for the degree of pain that each client was experiencing. Each client also had tightened, fibrous fascia that was pulling the arm into internal rotation and splinting the area which greatly contributed to the lack of range of motion. Finally, each client had significant adhesions that had developed from being in the strain pattern while using the arm. Some of these adhesions were deep and were compressing nerves next to bony prominences resulting in significant pain when their arms were moved. The tightened fascia was also in and around the muscle fibers which added to the limitation of range of motion.

The protocol I designed to treat these shoulders would first and foremost release the internal rotation of the shoulder and arm; 2<sup>nd</sup> reduce swelling and inflammation and the associated pain; 3<sup>rd</sup> release the myofascial holding pattern that was helping to lock the internal rotation and restrict the range of motion; 4<sup>th</sup> lengthen the fascial and muscle fibers that had become shortened and contracted locking the shoulder into internal rotation and restricting its range of motion; and 5<sup>th</sup> release the adhesions and scar tissue that had formed which were compressing nerves and restricting the range of motion of the shoulder and arm.

Gina, the college student, was having significant pain from whiplash in her neck and low back. So, the first treatments addressed the structural collapse of the spine. Even though I was not working directly with the soft

tissue of her shoulder, there was some improvement. The reason her shoulder went so far into internal rotation was the distortion in her spine from her auto accident. After six sessions focusing on the head, neck and shoulder and low back to balance the spine, I was able to start concentrating on her shoulder. In the initial sessions it was necessary to spend most of the time releasing the fluid, ischemia and inflammation from the shoulder and arm. Then I was able to work the 3-step approach by 1<sup>st</sup> releasing fluids and toxins, 2<sup>nd</sup> releasing the myofascial holding pattern with directed myofascial unwinding strokes strokes, and 3<sup>rd</sup> concentrating on individual fibers and adhesions. She quickly experienced relief of some of the symptoms and an improved range of motion. After five more sessions she was pain free with full range of motion.

Jerry, the massage therapist, had arm and shoulder problems longer than the rest of the group. Unlike Gina, the structural collapse of his spine was not significant enough to cause pain, so I was able to work with his shoulder from the first session. The 3-step approach worked extremely well with Jerry. However, I could not treat some of the deepest adhesions and scar tissue in the shoulder until the sixth session because of the degree of myofascial holding and shortened fibers that had accumulated as the problem was developing. After full range of motion had been reestablished, he chose to have me release the distortion in his body that had supported and actually caused his shoulder problem. In addition, he devised a different way to retrieve his table from the trunk of his car without twisting or straining his shoulder. Jerry was fully rehabilitated when his overall body structure was balanced and strong enough so that his daily activities did not pull him into a structural distortion.

Tom, the accountant, did not have the degree of structural collapse of the spine that Gina had so I was able to work from the first session on his shoulder and arm. As with Gina, the 3-step approach was very effective and allowed me to release the fluids and inflammation, the myofascial holding pattern, and the adhesions, scar tissue and shortened fibers in his shoulder and arm. After four sessions, Tom was pain free and started to slowly strengthen the arm for soft ball.

I hope these three cases will help you see the importance of evaluating structure and applying the 3-step approach when working with shoulder problems. Until next time, continue your great work!