

# Adjusting the Scapula



Picture 1: Medial inferior scapula contacts on skeletal model are displayed. Web contacts are taken on both the superior lateral and medial inferior poles of the scapula.

## CASE STUDY:

A 35-year-old male golfer presents to the clinic with right posterior shoulder pain. The patient informs the doctor that the problem began following a hard drive off of the tee, two months ago. The patient also complains of shooting pain into the entire shoulder, which began three weeks ago and has been getting progressively worse. The doctor clinically observes that the patient's posture displays a significantly low shoulder on the affected side, and has a visually flared scapula on the involved side. Physical examination reveals that the pain is aggravated with arm abduction past 90 degrees. Furthermore, due to the lack of flexibility in the shoulder, the patient begins to laterally flex his body in order to abduct the arm higher than 90 degrees. Examination further reveals that static and motion palpation of the scapula produces pain, especially when assessing rotation. Static palpation reveals that the inferior pole of the scapula has deviated medially and inferiorly. Palpation also reveals pain and tenderness located at the rhomboids major muscle on

the involved side. X-ray analysis is unremarkable, and with exception of the shooting pain into the shoulder, neurological examination is also unremarkable.

This type of case, and corresponding physical exam findings, is the typical clinical scenario that would be present when a patient is suffering from a medial inferior scapula subluxation, with corresponding cervical-brachial traction syndrome. In this edition of Technique Toolbox, I will discuss Minardi Integrated Systems, how to adjust the scapula, and what other issues need to be ruled out with the presiding symptoms.

## MINARDI INTEGRATED SYSTEMS (MIS)

Minardi Integrated Systems (MIS) evolved from my passion for chiropractic techniques, combined with clinically relevant biomechanics and neurology. When I was in chiropractic college, I was a "technique junkie," pursuing knowledge and understanding of technique beyond the core requirements at school, as I felt this was necessary to achieve my goals of being an excellent clinician and chiropractic leader. I loved everything about chiropractic technique, and learned as much as I could from anyone who was willing to teach me. In the beginning, I learned from upper year students – whom, I quickly discovered, were a valuable and important resource in many ways – my instructors at school, technique clubs, and by attending several outside seminars on a variety of techniques. Technique clubs were truly the cornerstone of my learning, and without them, I wouldn't have the passion and love I currently have for chiropractic. (In fact, I still highly recommend that students become involved in these, at some point throughout their education.)

The technique that really caught my attention was the Thompson Technique. I began to focus more on this technique, and in my second year in chiropractic college, I became the president of the Thompson Club. Under the scrutinizing eyes of my peers, I quickly realized that the rationale for the technique had never been researched – nor were the existing explanations for its efficacy adequate, in my opinion. This sparked a desire for me to research the rationale of how and why the technique worked. I intensely delved into the disciplines of neurology and biomechanics, striving to find a more tenable explanation for Thompson's benefits. Thus, I was able to slowly piece together a more scientific foundation for the technique. However, even with this validation, it was clear that gaps were still present in the technique.

At this point, I became a practicing chiropractor, and began systematically gathering my



Picture 2: Doctor's contacts for a medial inferior scapula are displayed. Note how the patient's affected side is in the "chicken wing" position to assist with the contacts.

own data on patients' symptoms, leg length analysis, x-ray findings, and palpation findings which formulated criteria for detecting alternative subluxations. Through this work, I was able to fill in many of the holes that previously existed in the technique as I had learned it. Thus, in the pursuit for greater understanding, I expanded on the classic Thompson Technique, and incorporated my own work with that of Stucky and Thompson, to form a comprehensive full body adjusting procedure called Minardi Integrated Systems. Also known as The Complete Thompson Technique, extremity analysis and adjusting are just some of the new additions that have been incorporated, in an attempt to fill in any openings that existed previously.

Injuries to the scapula often result from poor flexibility and subsequent tension of the soft tissue supporting structures. In the game of golf, individuals are trying to generate tremendous acceleration, in order to increase club head speed. The resultant speed produces longer distances on their drives. According to Dr. Jeff Blanchard, "golfers know they have to take a long backswing to generate power for distance, but 80 per cent of them lack the necessary flexibility in the scapula and glenohumeral joint, so they compensate by bending the forward elbow."<sup>1</sup> This can subsequently lead to elbow injuries, or as in our case above, can result in scapular deviations due

to improper muscle recruitment. When a medial inferior scapula subluxation is present, this indicates that the inferior pole of scapula has misaligned medial and inferior, with slight protraction.

Before any extremity adjustments are performed, I highly recommend that the spine be fully assessed and corrected accordingly, as many extremity complaints can potentially be referral pain originating from the spine. Following proper analysis, detection and correction of any spinal subluxations present, the doctor should continue on to any further extremity adjustments that may be warranted. In our case above, the patient was assessed and adjusted full spine first, then the clinical findings present indicated that the scapula was subluxated, and needed to be corrected as well.

*Correction:* Prone Medial Inferior Scapula Adjustment: (See Pictures 1 and 2)

- Patient: Prone. Affected arm in "chicken wing" position.
- Doctor: On affected side, facing the patient.
- Table: Dorsal piece in the ready position.
- Contact 1: Web contact medial to the inferior pole of the scapula.
- Contact 2: Web contact on the lateral-superior aspect of the scapula.
- LOC: Contact 1: Lateral and Superior.

Contact 2: Medial and Superior.

The rotational component of the thrust will correct for the scapular rotation, whereas the drop piece will assist in the protraction of the scapula.

It is important for the doctor to be aware that this type of subluxation can sometimes cause a condition called cervico-brachial traction syndrome. This condition can occur when certain nerves arising from the brachial plexus become stretched and irritated, causing shooting pain into the distribution of those affected nerves. In our particular case, the scapula subluxated medial and inferior, producing traction on the suprascapular nerve and the axillary nerve. The suprascapular nerve passes through the suprascapular notch of the scapula, and the axillary nerve passes through the quadrangular space. Therefore, both nerves may be directly irritated by the scapular subluxation, and may produce symptoms associated with the function of these nerves, such as shooting pain into the C5-C6 nerve distribution.

The doctor must also take into consideration the slight winging of the scapula associated with this subluxation. Therefore, the doctor must rule out any problem with the long thoracic nerve which innervates the serratus anterior, and produces a winging scapula when compromised. The problem with the long thoracic nerve may be associated with an original cervical problem, thus, the doctor must correct for this primary problem before any extremity adjustment is performed. If the serratus anterior muscle is injured or damaged, this too can cause scapular winging, and proper soft tissue therapy can be utilized, as well as a muscle rehabilitative program for the serratus anterior. Furthermore, due to the decreased shoulder abduction present, an injured supraspinatus must be ruled out, and treated accordingly if necessary.

As usual, I have only scratched the surface with this technique. If you would like to learn more about Minardi Integrated Systems, please visit [www.ThompsonChiropracticTechnique.com](http://www.ThompsonChiropracticTechnique.com). If you would like to see a specific technique featured in a future edition of Technique Toolbox, please contact me at [johnminardi@hotmail.com](mailto:johnminardi@hotmail.com).

Until next time... adjust with confidence! •

## REFERENCES

1. Blanchard, J. Golf injuries Part 4. Dynamic Chiropractic. 2008. June.

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