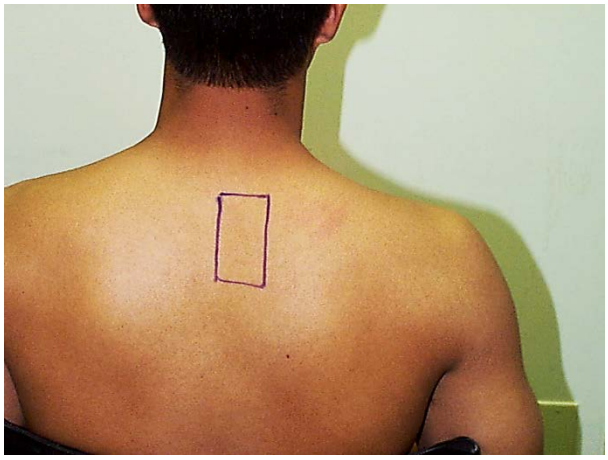
STERNUM-VERTEBRAL RIB COMPONENT SYNDROME

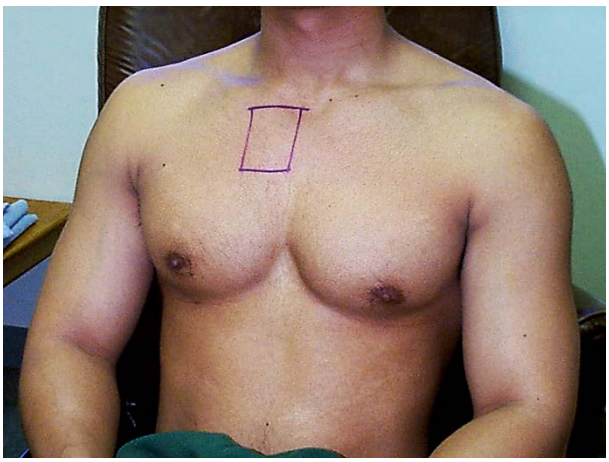
The *Sternum-vertebral Rib Component Syndrome* is a rather odd syndrome. Primarily, the patient will complain of a sharp pain in the upper thoracic area near the spine, and some pain radiating along an associated nerve root distribution, usually into the posterior aspect of the shoulder and (or) into the arm on the involved side. Typically, if only the para vertebral area is treated, the patient may enjoy some improvement in the degree and extent of the pain, but much of it will remain. If this should happen, a DSR zone survey of the anterior para-sternal area, on the involved side, may demonstrate an inflammation pattern to be present over the sternal articulations of the ribs, whose vertebral articulations lie under the inflammation pattern present in the posterior. In such a case, both the posterior and anterior aspects of these coincidental patterns must be treated to affect a successful resolution of the syndrome. Generally, no overt swelling can be observed, and the patient will typically be unaware of any discomfort from the anterior chest.

Treatment

Treatment must be directed at relieving inflammation and eliminating adhesions in both anterior and posterior components. If only one side has been treated, clinical evidence suggests that both components will continue to be a problem, with both inflammation and adhesions subsequently found during re-evaluation.



The high skin resistance pattern commonly associated with the Para-Vertebral Component of a Sternum-Vertebral Rib Component Syndrome involving the right T2 to T4 rib articulations



The high skin resistance pattern commonly associated with the Sternum Component of a Sternum-Vertebral Rib Component Syndrome involving the right T2 to T4 rib articulations

Application:

- Place a negative electrode over the posterior inflamed zone and a positive electrode over the anterior inflamed zone. Preset an electrical stimulation to deliver a visible contraction, at 7 Hz, and stimulate for 10 minutes.

- Then, preset the unit to deliver a medium frequency current, with a duty cycle of 10-seconds on and 10-seconds off, sufficient to produce a near tetanic contraction of the involved muscles. Stimulate for 10 minutes.

- Manipulate the soft tissue over both the posterior and the anterior inflamed zones to eliminate any adhesions that may be present.

- Preset the ultrasound unit to deliver a 1 MHz pulsed waveform, at 1.8 W/cm^2. Ultrasound the posterior inflamed zone, utilizing an effective non-steroidal anti-inflammatory as a coupling agent, for six minutes.

- Then, preset the ultrasound unit to deliver a 3 (or 3.3) MHz, pulsed waveform, at 1.5 W/cm^2. Ultrasound the posterior inflamed zone, utilizing an effective non-steroidal anti-inflammatory as a coupling agent, for six minutes.

- Manipulate the upper thoracic vertebral joints (but only if performed by a skilled joint manipulator). If the most proximal thoracic vertebrae are involved, an *axial lift* (a full-nelson combined with especially timed lift and scapular retraction) might be most helpful (***vertebral manipulation should only be performed by a trained practitioner***) (refer to Appendix, Spinal Manipulation).

The following treatment form has also been effective.

Variation:

- Preset the ultrasound unit to deliver a 1 MHz pulsed waveform, at 1.8 W/cm^2. Ultrasound the posterior inflamed zone, utilizing an effective non-steroidal anti-inflammatory as a coupling agent, for six minutes.

- Then preset the ultrasound unit to deliver a 3 (or 3.3) MHz, pulsed waveform, at 1.8 W/cm^2. Ultrasound the posterior inflamed zone, utilizing an effective non-steroidal anti-inflammatory as a coupling agent, for six minutes.

- Manipulate the tissues in and around the inflamed zones to eliminate any adhesions that may be present.

- Apply cold laser (with or without simultaneous electrical stimulation provided by the laser applicator) to the inflamed zone for approximately six minutes. This is performed to "cool off" the manipulated zone by effectively halting the production of prostaglandins (or facilitating enzyme destruction of **all** inflammatories being produced) by the stressed tissues.

- Manipulate the upper thoracic vertebral joints (but only if performed by a skilled joint manipulator). If the most proximal thoracic vertebrae are involved, an *axial lift* (a full-nelson combined with especially timed lift and scapular retraction) might be most helpful (***vertebral manipulation should only be performed by a trained practitioner***) (refer to Appendix, Spinal Manipulation).

Successful resolution of the ***Sternum-vertebral Rib Component Syndrome*** may require only one or two sessions.

Trigger Points

The following trigger point formations may, singly or in combination, imitate or contribute to the pain associated with the *Sternum-vertebral Rib Component Syndrome*: Posterior cervical group, Levator scapulae, Scalenus, Scalenus minimus, Infraspinatus, Infraspinatus (abnormal), Medial teres major, Lateral teres major, Teres minor, Coracobrachialis, Lower splenius cervicis, Upper trapezius [B], Middle trapezius [A], Middle trapezius [B], Middle trapezius [C], Lower trapezius [A], Lower trapezius [B], Cervical Multifidus (C4-C5), Supraspinatus (muscle), Supraspinatus (tendon), Latissimus dorsi (upper portion), Serratus posterior superior, Serratus anterior, Subclavius, Subscapularis, Posterior deltoid, Anterior deltoid, Pectoralis major, Pectoralis major (clavicular fibers), Pectoralis major (parasternal fibers), Pectoralis major (sternal portion), Pectoralis minor, Sternalis, Rhomboids, Multifidus (T4-T5), Iliocostalis thoracis (T6), Iliocostalis thoracis (T11), and Upper rectus abdominis.