SUB-OLECRANON PROCESS SYNDROME

The cause of the S*ub-olecranon Process Syndrome* is to date uncertain, but most of the patients whom have demonstrated it have been engaged in a regular program of heavy weight lifting. This syndrome generally appears asymmetrically, and to the elbow on the weakest side. The suffering patient usually complains of symptoms similar to those accompanying the *Tennis Elbow Syndrome* or the *Radial Channel Syndrome*. The patient will describe a sharp pain beginning in the elbow and radiating down along the posterior forearm. This pain presents itself most commonly when the elbow is fully extended and the fingers are clenched in a fist or the fingers forcefully grasp something. The patient may initially suffer from one or more of the common elbow syndromes (the *tennis elbow, radial channel,* or *Olecranon Fossa Syndromes)* with the classic associated symptoms, including the distinctive DSR pattern(s). The fact that the patient suffers from the S*ub-olecranon Process Syndrome* may not be discovered until the previously discovered DSR pattern(s) disappear(s) and the patient is still complaining of the original symptoms.

To confirm the presence of the S*ub-olecranon Process Syndrome*, a DSR survey of the elbow, flexed to 90^{o}, will demonstrate a relatively high skin resistance pattern just superior and along the edge of the tip of the olecranon process, measuring ½ inch wide and an inch long. The DSR survey will usually demonstrate the distal medial triceps trigger point site to also be present.

Treatment

The treatment of the S*ub-olecranon Process Syndrome* (and the distal medial triceps trigger point, if present) involves breaking any adhesions that are present and eliminating any associated inflammation.

Application:

- Apply paper tape (masking tape) along the outside borders of the sub-olecranon process DSR pattern. The tape, thus applied, will protect the surrounding bone from ultrasound bombardment. Ultrasound will not penetrate paper tape. ***The elbow should be flexed to 90^{o} during the entire treatment.***

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

- Remove the paper tape from around the sub-olecranon process DSR pattern.

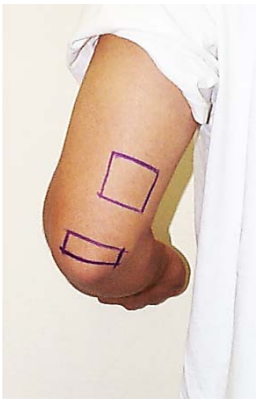
- Place a negative electrode over the sub-olecranon process site and a positive electrode over the distal medial triceps trigger point site. Preset an electrical stimulation unit to deliver a medium frequency current with a duty cycle of 10-seconds on and 10-seconds off, at an amplitude sufficient to produce a visible tetanic contraction of the distal medial triceps muscle. Stimulate for 15 minutes.

- Manipulate the soft tissues in and around the inflamed zones to break any adhesions that are present.

- Preset the ultrasound unit to deliver a 1 MHz pulsed waveform, at 1.5 W/cm^2. Ultrasound the distal medial triceps trigger point site, utilizing an effective non-steroidal anti-inflammatory as a coupling agent, for six minutes.

- Preset an electrical stimulation unit to deliver a visible contraction of the local muscles at 7 Hz. Place a positive electrode over the sub-olecranon process site, and a negative placed over an area several inches superior to the distal medial triceps trigger point site. Electrical stimulate for 20 minutes.

- Apply paper tape (masking tape) along the outside border of the sub-olecranon process DSR pattern.



The high skin resistance patterns commonly associated with the

Sub-olecranon Syndrome: the Sub-olecranon process (inferior)

and the Distal Medial Triceps Trigger Point (superior)

- Preset the ultrasound unit to deliver a 1 MHz pulsed waveform, at 1.8 W/cm^2. Ultrasound the sub-olecranon process site once again, utilizing an effective non-steroidal anti-inflammatory as a coupling agent, for six minutes.

- Apply mechanical vibration vibrate to an area well superior to the distal medial triceps trigger point site (the medial triceps origin), delivered at 60 to 120 Hz. Apply the vibration at a relatively high but tolerably comfortable level for the patient. This is performed to increase capillary circulation in the involved tissues. Vibrate for two minutes.

Discounting any previously existing or masking syndromes (*tennis elbow, radial channel,* or *Olecranon Fossa Syndromes)*, treatment should be effective, with a complete cessation of symptoms, within three or four sessions.

Trigger Points

The following trigger point formations may, singly or in combination, imitate or contribute to the pain associated with the S*ub-olecranon Process Syndrome*: Scalenus, Scalenus (minimus), Infraspinatus, Lateral teres major, Coracobrachialis, Middle trapezius [C], Supraspinatus (muscle), Latissimus dorsi (upper portion), Serratus posterior superior, Subclavius, Medial triceps (lateral fibers), Lateral triceps, Triceps (long head), Distal medial triceps, Anconeus, Brachialis, Supinator, Middle finger extensor, Fourth finger extensor, Flexor carpi radialis, Brachioradialis, Pronator teres, and Extensor carpi radialis longus.