TENDON RELEASE THERAPY

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FOR TREATMENT OF TENDON TISSUE TENSION WITH ADVANCED STRAIN AND COUNTERSTRAIN

- The tendons are apparently innervated by the autonomic nervous system, because functionally, they respond in a similar manner to smooth muscles.
- There is a passive contractile function, that is required for the stretch reflex of the proprioceptors, such as the Golgi Apparatus.

- The contractile tissues are longitudinal along the length of the tendon.
- When there is hypertonicity of a tendon, it presents as a rigidity of the tendon.
- There is a reduced capacity of elongation and contraction of the tendon fibers.

- Duration of treatment of tendons with Advanced Strain and Counterstrain is 1 minute because all innervated muscles require 1 minute for release of hypertonicity.
- This approach was developed by Giammatteo and Weiselfish-Giammatteo, incorporated into
- "Advanced Strain and Counterstrain Technique."
- The process of Defacilitated Fascial Release works well with tendon hypertonicity.

- Tendons of voluntary striated muscles are treated in a relatively simple manner with Advanced Strain and Counterstrain Technique, with excellent results.
- The distal and proximal ends of the tendon are pressed against the bone, pressing perpendicular through the fiber onto the bone.
- This pressure is at the insertion of the distal aspect of the tendon, where it inserts into the bone, and at the proximal aspect where the muscle fibers integrate with the tendon fibers.

- Maintaining this direct pressure of approximately 1 pound force, the distal and proximal ends of the tendon are compressed.
- This compression is along the longitudinal length of the tendon fibers. The compression is maintained for 1 minute for release of hypertonicity of the tendon.
- There may remain fascial restrictions of the tendon, which may still require fascial release.
- □ The tendon responds well to Defacilitated Fascial Release.

Tendon Release Therapy

Step 1

Place the index finger (or the index finger plus the third finger) pad of the distal phalanx of the caudal hand over the place of insertion of the inferior end of the tendon.

Place the index finger (or the index finger plus third finger) pad of the distal phalanx of the superior hand over the musculotendinous interface of the muscleltendon, at the superior aspect of the tendon.

Step 3

Push on the tendon tissue with both hands (fingers) with 1 Ib. force perpendicular onto the bone.

□ Step 4

Then compress the superior aspects and inferior aspects of the tendon together with 1 lb. force, bringing the proximal and distal ends of the tendon closer together.

Maintain these (4) compressive forces for one minute for the Advanced Strain and Counterstrain.

□ Step 6

 If fascial unwinding is perceived, maintain the (4) compressive forces during a Defacilitated Fascial Release.

Indications for Tendon Release Therapy

- There are essentially no contra-indication for Tendon Release Therapy when performed in this manner, unless there is a total rupture of the tendon.
- When there is a total rupture of the tendon,
 the technique will not be effective.
- If there is a tear or rupture of the tendon,
 but there is a correction performed (surgical),
- □ the technique can be performed.

The technique will give results

- in decreased hypertonicity and rigidity of the tendon if the Tendon Release Therapy is performed immediately after surgery.
- There will be a facilitated healing of the tendinous injury.

- Tendon Release Therapy is best performed
- after Strain and Counterstrain is performed to the muscle of the tendon.
- Often there is no remaining hypertonicity of the muscle, only of the tendon.
- In that case, Tendon Release Therapy can be performed without Strain and Counterstrain to the muscle.

- After Tendon Release Therapy is performed,
- there may be some residual fascial dysfunction

of the connective tissue of the tendon.

This occurs most often when there are tears and scarring of the tendon.

- The Advanced Strain and Counterstrain for the tendon (Tendon Release Therapy) affects the hypertonicity of the tendon, resulting in a softening of the tendon and a decrease in the rigid presentation of that tendon.
- When Defacilitated Fascial Release is performed immediately after the Tendon Release Therapy, often the fascial dysfunction is corrected.
- When the scarring of the tendon (the fibrosis) is severe, there is often a need to perform the fascial release after the Tendon Release Therapy.

Sequence of Strain and Counterstrain for Tendons

- □ 1. Muscle Energy and 'Beyond' Technique
- 2. Strain and Counterstrain for the muscle (of the involved tendon).
- 3. DeFacilitated Fascial Release for the muscle (of the involved tendon).
- 4. Tendon Release Therapy (Advanced train and Counterstrain).
- □ 5. DeFacilitated Fascial Release for the tendon.
- 6. Myofascial Release (3-Planar Fascial Fulcrum) Tendon Technique.

Example: Achilles Tendon

- Tender Point At the insertion of the Achilles tendon
- Position Prone.
- A small towel roll is placed under the ankle, or the foot is off the edge of the bed, so that the foot and ankle are not in forced plantarflexion.
- Treatment
- Place the index finger (or index finger plus the third finger) pad of the distal phalanx of the caudal hand over the place of insertion of the achilles tendon at the calcaneus.



Figure 18. Tendon Release Theropy[®] for the Achilles Tendon. Step 1: Compress A. and B. posterior to anterior. Step 2: Shorten the length of the tendon (C. and

- Place the index finger (or index finger plus third finger) pad of the distal phalanx of the superior hand over the musculotendinous interface of the gastrocnemius muscle with the achilles tendon, at the superior aspect of the tendon.
- Push the tissue with a 1 lb. force perpendicular into the tibia. Then compress the superior aspect and inferior aspect of the tendon together with about a 1 lb. force, bringing the 2 ends of the tendon closer together.
- Maintain these compressive forces.

Indications For Tendon Release Therapy

- Common disorders which respond well to Tendon Release Therapy:
- Tendinitis
- Hypertonicity (protective muscle spasm and spasticity)
- Muscular Dystrophies
- Hypotonias
- Fibromyalgias
- Tenosynovitis
- Tears and ruptures of tendons
- De Quervain-like syndromes
- Hallux Valgus-like syndromes
- Tendon Calcifications, such as calcification of supraspinatus tendon and bicipital tendon calcification

Typical Tendons which respond well with Tendon Release Therapy:

- Achilles Tendon
- Medial and Lateral Hamstrings
- Tendons
- Quadriceps Tendon
- Tibialis Anterior Tendon
- Tibialis Posterior Tendon
- Extensor Tendons of the Foot and Toes
- Flexor Tendons of the Foot and Toes
- Abductor Hallucis
- Adductor Tendons of the Hip
- Rotator Cuff Tendons: Supraspinatus,
- Infraspinatus, Subscapularis

- Latissimus Dorsi
- Biceps Tendons (Short Head and Long Head)
- Triceps Tendon
- Coracobrachialis Tendon
- Brachioradialis Tendon
- Wrist Flexor Tendons
- Wrist Extensor Tendons
- Finger Flexor Tendons
- Finger Extensor Tendons
- Abductor Pollicis Tendon
- Flexor Pollicis Tendon