

Thompson Terminal Point Technique pre Reading:

Welcome to the Thompson Terminal Point Technique Australia and New Seminar series. Australia has had been fortunate when in comes to exposure to pioneers and developers of chiropractic techniques. The Gonstead Seminars are a great example with the Cox Brothers and subsequently the Australian Gonstead Chiropractic Society taking the reins to carry on the legacy.

Thompson Technique has been similarly blessed with Dr J Clay Thompson teaching the Seminars in person and then Dr Alan Brady and his children Drs Russell, Scott and Sheridan all carrying the mantle. Sheridan has been most active over the past 20 years developing the Technique through the New Zealand College of Chiropractic and in person live events throughout Australia and New Zealand. Other key influencers in carrying on the Thompson legacy in Australia are Drs Rob Jackson and John Minardi.

The Thompson Terminal Point Technique was developed hand in hand with Williams Healthcare Systems, the parent company of Zenith Chiropractic Tables. Whilst most drop tables are suitable to use many of the fundamentals of the Technique, the Zenith Table was developed specifically for to the Thompson Terminal Point Technique.

Key aspects of the Thompson table are the Forward Motion Cervical Drop piece, Pelvic Crank, Directional Lumbar Section, centre post drops as opposed to hinged drops through the Lumbar and Thoracic, Adjustable height ankle rests and automatically stowed foot board. The Zenith 440 family of tables have long since been the workhorse in the Chiropractic profession and with the addition of Pneumatic drop activation, made the delivery of the Thompson Terminal Point technique rewarding, comfortable and effective for both patient and practitioner.



The Thompson technique has arguably been the basis for much if not all drop assisted or force modified techniques.



The Thompson Terminal point technique is based largely on a combination of Newtons First 3 laws of Motion: Summarised as "A body is in equilibrium if no force is acting upon it. If it is at rest, it remains so. If in motion, it persists in motion, unless an opposing force is met."

The basis of the technique:

Fundamental to the Thompson Drop technique is the reliance on the pillars of good chiropractic fundamentals – observation, palpation, examination, technique and interpretation. Like any good process, if we follow a system, as opposed to a scattergun approach of testing, adjusting repeated questioning and unorthodox methods, we can more adequately analyse spinal subluxation and predictably make appropriate structural and Neurological corrections. From here, we can both observe and measure the outcomes.

Importantly, and possibly to the relief of many Chiropractors or students of Chiropractic, the Thompson protocol can be integrated easily into the day to day procedures of any practitioners work flow. When used correctly, the process can be both effective and incredibly time efficient allowing for good patient outcomes without slowing the flow of a busy work environment.

Used in all Thompson Analysis is the Derefield leg length assessment. Carried out with the patient in a prone position, the leg lengths are assessed outstretched



(position 1) and then Flexed to or just past 90 degrees (Position 2). Observation is made to the length of the legs in both. When combined with a cervical assessment, the forms the basis of much of the Thompson Technique.

Key observations:

- 1. When Extended, the legs can be either EVEN or one side will appear contracted.
- 2. When even in extension (Position 1) we have 3 options using the Thompson Protocol.
 - a. Normal
 - b. Bilateral Cervical Syndrome or
 - c. Derefield-X/ X-Derifield/ X-D
- 3. When one leg is relatively contracted in Position 1 we have 3 options
 - a. -ve D/ Negative Derefield, -D or
 - b. +Ve D/ Positive Derefiled/ +D
 - c. Cervical Syndrome

Cervical Syndrome:

Leg check findings – one leg contracted

Contracted leg balances upon rotation of head

Name the cervical syndrome for the side that the HEAD IS TURNED.

Tender Nodule on the cervical spine on the side OPPOSITE to the direction the head is turned.

<u>Bilateral Cervical Syndrome</u>: (Not to be confused with 2 Separate Cervical Syndromes)

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Leg check findings - Legs START EVEN

Turn head right, right leg shortens, turn head left, left leg shortens

Possible double AS occiput listing

Tender sub-occipital muscles bilaterally?

Tender C2 spinous process?

X Derefield or Derefield EX



Leg Check findings – Legs start EVEN

Flexion of the legs will add tension to the spinal cord by rocking the pelvis forward. This will exaggerate any neurological component of the subluxation.

This is a cervical syndrome test with the legs FLEXED.

-Ve Derefield:

Contracted Leg Position 1 appears contracted in Position 2.

May appear to even out is still noted as -D

Trigger points for AI Sacrum: Achilles Thickening, Medial Knee tenderness (affected side), Ischial tenderness, SI Join tenderness, Contralateral T3-T5 discomfort and ipsilateral upper cervical tenderness associated with the righting reflex.

For AS Ilium – Tender medial Gastroc

No Trigger points – Check for 5th **Lumbar rotation.** Note, Lumbar body will rotate toward the side of contracted leg. Xray and palpation to assist.

+ve Derefield:

Leg check findings - one leg CONTRACTED

Leg positively crosses over when flexed

May notice legs wanting to "swing" off to one side while performing the leg check

PI ilium on involved side

Basic Neurology of the Contracted Leg: Dr John Minardi

Basic Neurology Underlying the Contracted Leg in Thompson Technique.

John Minardi BHK, DC.

When a subluxation exists, the aberrant mechanics associated with the misalignment produces a distortion of the muscle, facet joint, intervertebral disc and tendon attached to the segment. This distortion/change is detected by the nuclear chain and



nuclear bag fibres within the muscle spindle, the Golgi Tendon Organ within the tendon, and proprioceptive receptors located in the facet capsule and intervertebral disc.

All four of these structures are innervated by Type 1 and Type 2 nerve fibres. When the distortion produced by the subluxation is detected, these structures send this information via the Type 1 and Type 2 afferent fibres.

These nerve fibres send this information to the cerebellum through two primary ascending tracks; the ventral and dorsal spinocerebellar tracts. These tracts gather this proprioceptive information and send it to the cerebellum. The cerebellum now has the information concerning the distortion from the subluxation. This cerebellar information is sent to the thalamus, which takes the information and sends it to the cortex. The cortex contains information about what should be happening within the body (ie. the distortion should not be occurring).

If the information of the cerebellum and motor cortex are the same, then everything is normal and no response is sent. However, if the information differs, which is the case with a subluxation, then the cortex will send a response through the brainstem using the extrapyramidal tracts, the most important of which for the short leg phenomenon is the vestibulo-spinal tract.

The vestibulo-spinal tract is most important with regards to the short/contracted leg because unlike the other spinal tracts, the vestibulo-spinal tract is *always excitatory* and always facilitates postural muscles, primarily located in the lower limb and pelvic girdle. Thus, when this descending tract fires, it results in a physiological shortening/contraction of the extrafusal fibres of the postural muscles, thus causing a short/contracted leg.

This is why we are always looking for the short leg, and never the long leg, because we are looking for that facilitative shortening of those postural muscles because of the vestibulospinal tract.