BALANCED LIGAMENTOUS TENSION
Indications/ Contraindications

- Useful for treating any somatic dysfunction
- It is especially useful when treating:
  - Pediatric patients
  - Geriatric patients
  - Hospitalized patients
  - Acute somatic dysfunctions
  - Articular somatic dysfunctions
- AVOID using in cases of:
  - Acute fractures or suspected fractures
  - Patient intolerance or lack of consent
  - When OMT is contraindicated
"If you understand the mechanism, the treatment is simple"

W. G. Sutherland

- Diagnosis and treatment are inseparable
- Focus on finding health – in motion, structure, texture, rate of CRI
INTRODUCTION

- Diagnosis and treatment are inseparable. This does not mean you begin treating without a diagnosis.
- Remain in a perceptive state during the treatment, continue to look for diagnostic clues in the response of the patient to the treatment.
- Place your attention on the patient’s response to your treatment, not on what you are doing.
Principles

- Assist innate forces of patient to find health in circulation, lymphatics, fascias, all components of PRM
- “Visualize” anatomy of area to be treated in context of entire mechanism
- Always work within “permitted motion” of the PRM
- Visualize Sutherland’s Fulcrum – not lamina terminalis
Fig. 877.—Sagittal Section of Skull, a little to Left of Median Plane, to show Arrangement of Dura Mater.
Key Concepts

- To make observations of the mechanism’s response
- A systematic way of assessing the function of the SBS
- A palpatory skill to gently work WITH the mechanism
PALPATION

- Motion Permitted vs Motion present
- Compliance vs Excursion (Accommodative?)
- Is condition acute or chronic?
Balanced Membranous Tension

“That point in the range of motion of an articulation where the membranes are poised between the normal tension present throughout the free range of motion and the increased tension preceding the strain or fixation which occurs as a joint is carried beyond its normal physiology” (WGS)
Balanced Membranous Tension

- Most “neutral” position possible under the influence of all factors responsible for the existing strain pattern
- All tensions have been reduced to absolute minimum to culminate in a still point
- Determining this point is test of palpatory skill and sense of motion
General principles I: Reciprocal Tension Membrane

- RTM is just one component of the primary respiratory mechanism.
  - Constantly alternating between flexion and extension.
  - Influenced by CSF fluctuation and motility of CNS.
- Mechanical link, the check ligament of the skull.
- Functional unit - one part moves and all try to move.
Reciprocal Tension

- Ligamentous tension is shared at a given joint/segment, so that the sum of the tension remains constant
  - Tensions are constantly changing as we are constantly moving
  - Ligaments have a level of tension which are balanced with each other in a given joint/segment
  - Ligaments can tear when traumatized, but do not become lax, or stretch during normal activities
  - Somatic dysfunction alters the balance of ligamentous tension
Aim of Treatment

- Normalize function – autonomic balance, CSF fluctuation, vascular congestion relief, nerve entrapment
- Release strain – postural, pituitary (as it could affect endocrine system, result in emotional imbalance)
- Release membranous tension – dural and other membranes
- Correct cranial articular dysfunctions
- Modify gross structural patterns – accommodation of structure/function
Evaluate posture, respiration, related anatomy and physiology to determine somatic dysfunction.

Remember “TART”?!
Posture and Respiration influence ligamentous tension.
Use BLT to treat LOCALLY or SPECIFICALLY or BOTH
Balanced Ligamentous Articular Mechanisms

- Greater sciatic foramen
- Lesser sciatic foramen
- Vertebral column
- Ligaments prevent upward tilting of sacrum
- Sacrospinous ligament
- Sacrotuberous ligament
- Obturator membrane
- Lumbosacral ligament
- Iliolumbar ligament
- Anterior longitudinal ligament
- Sacro-iliac ligament
- Vertebra disc

General Principles II: What is a Still Point?

Point of balance where inherent forces or potency work through the strain pattern and there is a cessation of inherent rhythm.

The PRM “reorganizes” itself into an optimal physiological fluctuant activity. This occurs around Sutherland’s fulcrum
Patient Forces for Assistance

- Innate intelligence of the mechanism
- Patient cooperation – respiration, postural, active cooperation (patient positions self in a way to help secure balance in a treatment procedure)
BLT Treatment Principles

1. Make an Accurate Diagnosis
2. Position the segment so that you create balanced ligamentous tension
3. Use “enhancing” maneuvers, such as respiratory cooperation or patient positioning, to further achieve balanced ligamentous tension
4. Hold the segment at the point of balanced ligamentous tension until release
5. Reassess
PALPATION PRINCIPLES

- In the **neutral** position, ligaments have the **minimal** amount of tension.
- When a segment is positioned to the point of BLT, **no** tension is palpable - the segment may feel disengaged.
- At the release, tension will feel increased as the segment shifts back to normal position.
- What moves the segment is the patient’s inherent forces (respiration, neural signaling) and position.
Treatment Details

- Importance of diagnosis
- Approach to patient
- Chronic and compensatory dysfunctions
- Planning treatment and treatment plan
Technique

- Hand placement and thorough knowledge of the mechanism are required to “allow the physiologic function within to manifest its own unerring potency”
- Accessing potency for therapeutic changes to occur when the mechanism reaches the point of balanced membranous tension
- A “still point” results from balance to promote corrective change
Assessment of the SBS

- Record keeping and follow progress
- Recognize restrictions and identify strains that require treatment
- Sort out complex situations - influence of bones, membranes or fluid on trauma or restrictions
158.—Dura mater and its processes exposed by removing part of the right half of the skull, and the brain.
Inducing Motion

- Identify dominant pattern of cranial base
- Use vault contact, initiate procedure from the neutral point between flexion and extension
- Induce motion into the mechanism, then FOLLOW it to assess the available range of motion, then allow it to re-establish itself
INDUCING MOTION

Always gently work WITH the mechanism, initiating a movement and then letting the mechanism express itself.
End Points of Treatment

• Therapeutic change – anatomic, physiologic, fluid, resolution of injury vectors
• Physiologic manifestations – respiratory, circulatory, primary respiratory rate & quality
• The still-point – dynamic interchange resulting from achievement of balance within the PRM