THREE DIFFERENT TREATMENT MODALITIES

1. Prolotherapy – Originally developed in 1936 by Dr. Earl Gedney, D.O. (called Sclerotherapy). It was renamed Prolotherapy in the 1950’s by Dr. George Hackett, M.D.

2. Neural Therapy – Originally developed in the 1920’s by two German physicians, Walter and Ferdinand Huneke.

3. Neural-Prolo – Developed by Dr. John Lyftogt in the 1990’s. Why did he do this??
This has caused a lot of confusion!
Thankfully, now, they are using new terms:

- Lyftogt Perineural Injection Technique
- MINT – Minimally Invasive Nerve Technique
This presentation is about the original Huneke Neural Therapy, \textbf{not} the Lyftogt Technique.
“...and this is Ralph, your anesthesiologist.”
TODAY’S LECTURE OUTLINE

- Three Layers of Chronic Musculoskeletal Pain
- What is Neural Therapy?
- Autonomic Nervous System and How it is Damaged
- Interference Fields
- History of Neural Therapy
- Theories of How Neural Therapy Works
- Diagnosis methods
- Treatment methods
- Contraindications and Precautions
- Harris Method of Pain Treatment Protocol
- Conclusion
THREE LAYERS OF CHRONIC MUSCULOSKELETAL PAIN

1. MUSCLE SPASM

2. CONNECTIVE TISSUE DAMAGE

3. AUTONOMIC NERVOUS SYSTEM (ANS) DYSFUNCTION
SECOND LAYER: CONNECTIVE TISSUE DAMAGE

THIS IS WHAT PROLOOTHERAPY & PRP ADDRESSES
BOTTOM LAYER:
AUTONOMIC NERVOUS SYSTEM DYSFUNCTION
FIGURE 1: THE AUTONOMIC NERVOUS SYSTEM
HOW IS ANS DAMAGED?
THREE BASIC CAUSES

- TRAUMA (PHYSICAL OR EMOTIONAL, ACCIDENTAL OR IATROGENIC)
- INFECTIONS AND ABSCESSSES
- FOREIGN OBJECTS INSIDE BODY
SYMPTOMS OF ANS DAMAGE

FIRST SYMPTOM: When ANS is damages the result is:

PAIN
SECOND SYMPTOM OF ANS DYSFUNCTION:

- RESTRICTED BLOOD FLOW

  - SMOOTH MUSCLE OF VESSELS NOT BEING REGULATED CORRECTLY, I.E. CHRONICLY CONSTRUCTING WHEN NEED TO OPEN TO INCREASE FLOW TO DAMAGED AREAS
THIRD SYMPTOM OF ANS DYFUNCTION

- Tightening and Contraction of Fascia around the area of autonomic dysfunction
  - Secondary to aberrant autonomic nervous system input
**Typical Progression**

- **ANS Damage and Dysfunction** ("interference fields") **LEADS TO**
  - Decreased Blood Flow, **LEADS TO**
    - Constriction of Connective Tissue, **LEADS TO**
      - Muscle Spasms, **LEADS TO**
        - Decreased ROM, **RESULTS IN**
          - Somatic Dysfunctions, Connective Tissue Tearing and Muscle Spasms
ANS DAMAGE ALSO CREATES “INTERFERENCE FIELDS”
WHAT IS AN “INTERFERENCE FIELD?”

- Interference fields are areas of chronic hypopolarization, i.e. a smaller stimulus required to trigger nerve action potential (PAIN)
REVIEW OF BASIC NERVE PHYSIOLOGY
**FIGURE 2:** Healthy versus unhealthy nerve cell membrane resting potential and what happens when stimulated.
WHAT IS NEURAL THERAPY?

Neural Therapy is an injection treatment that addresses and resolves interference fields and corrects the underlying autonomic nervous system dysfunction, chronic ANS pain, hypo-perfusion and connective tissue tension thereby resolving chronic pain.
HISTORY OF NEURAL THERAPY

- Dr. G Spiess –

- Dr Leriche -

- Huneke brothers –

- “Unknown Distant Effects of the Local Anesthesia” 1928 -

- Klinghardt and Williams, Autonomic Response Testing (ART) –
THEORIES OF HOW AND WHY NEURAL THERAPY WORKS
FASCIAL CONTINUITY THEORY

- Trauma causes scarring in the fascia and adhesion between fascial planes, therefore neural therapy separates these which stops the pain.
**Lymphatic System Theory**

- Smooth muscle contriction in the lymphatics caused by sympathetic hypertonia, which results in lymphatic congestion in the tissues and PAIN. Neural therapy neutralizing the sympathetic hypertonia, allowing rapid drainage of the congested and toxic tissue and reduction of pain.
The Chronic aberrant neurological output over time causes the ANS to start to malfunction, setting up a regional pain syndrome.
**FIGURE 3:** Proposed mechanism of how Neural Therapy helps sick cells heal

- **Threshold to fire pain signal**
- **Membrane Resting Potential (mV)**
  - +60
  - -50
  - -60
  - -90
  - -120

- **Unhealthy nerve cell**
- **Neural Therapy local anesthetic**
- **Increased energy potential of cell**
- **Toxins**
- **Metabolic waste**

- **Nerve cell happy again**

- **After Neural Therapy treatments**
- Usually several needed unless has "lightening reaction"
Since the interference field is secondary to chronic hypopolarization of the neurons which causes aberrant electrical output from the ANS, which in term causes a matrix of the conformational change in the fascia. Neural therapy corrects this aberrant output and the fascia immediately returns to a healthy matrix conformation.
METHODS OF DIAGNOSIS
TEMPORAL ASSOCIATION

• Determine last injury, trauma or surgery prior to onset of symptoms, and treat those areas.
EMPirical approach

- Use known associations between interference fields and areas of pain
  - Example: an interference field caused by scar or infection in an ear piercing scar commonly causes neck and shoulder pain.
Systematic approach

Determine as many past trauma and injury sites as possible during the history taking and then systematically treat them all, i.e., “JUST DO EVERYTHING”
PROXIMITY

- Scars and trauma sites in close proximity to area of symptomatology are more likely to be causative so treat those.

- *However, important to remember: any interference field in the body can cause symptoms anywhere else*
AUTONOMIC RESPONSE TESTING (ART)

ART is a form of kinesiology developed specifically for evaluating the ANS.

It is the most reliable diagnostic tool when correctly done.
PATIENT CLUES

Most difficult, unscientific and etherial method (hard to definite objective parameters).

Example: patient scratching a scar, patient relays emotional event, etc.
METHODS OF TREATMENT
DIRECT ANESTHETIC INFUSION INTO DYSFUNCTIONAL AREAS OF ANS (DEEP GANGLIA OR SCARS)

- Deep Ganglia are classic and most effective however most risk

- Ex: sphenopalatine ganglion
STELLATE GANGLION BLOCK

Fig. 26: Herget’s method
Inferior Hypogastric (Frankenhauser) Plexus Block

Fig. 87, 88: Injection into the pelvic region [stages 1 (above) and 2 (below)]
SEGMENTAL THERAPY

- When deemed too risky to inject a deep ganglia directly, can inject skin areas innervated by these nerve areas.
- **Standard points**
- Points where reactions are frequently obtained
- Segmental reactions possible

![Figure 6](image)
Fig. 138: Intracutaneous quaddle
SCARS LESS RISKY AND ARE FREQUENTLY QUITE EFFECTIVE

• SURGICAL SCARS

• TRAUMA SITES

• “SCAR WITHOUT A SCAR” (crush injuries, blunt force areas, etc.)

* PUNCTURES, BITES
CONTRAINDICATIONS AND PRECAUTIONS

- Cancer
- Genetic abnormality
- Pregnancy
- Diabetes - Relative Contraindication
- Tuberculosis
- Nutritional Deficiency
- Major Psychiatric Illness
SUMMARY

- Trauma can cause areas of ANS dysfunction called “interference fields”.

- Interference fields, when treated by neural therapy, can resolve chronic pain.

- Areas of connective tissue pain which are left can be then treated with Prolotherapy.
The Harris Method of Pain Treatment

Patient Evaluation
- history, review of systems, structural/musculoskeletal and connective tissue exam, review of scars/surgeries, autonomic response testing

Verify no contraindications to neural therapy or prolotherapy

If interference fields found

Neural therapy:
- segmental, scar, deep autonomic ganglia (as per testing), repeat 1-3 week intervals, average 4-8 treatments

- Pain resolution
- Incomplete pain resolution

- Physical therapy & patient discharge

No interference fields found

Prolotherapy and/or PRP (platelet rich plasma injections), treat every 2-4 weeks, average 4-8 times

- Incomplete pain resolution
- Pain resolution

- Medical pain management
- Physical therapy & patient discharge
IDEA TO BRING HOME IDEA:

- Even if you are not proficient in neural therapy, injecting the scars in close proximity to a patient’s problem area may bring the patient added relief.
CONCLUSION

In my experience, when all three layers of pain are addressed with:

Neural Therapy
Prolotherapy
Physical Rehabilitation

you can get 90% of your chronic pain patients at least 85-90% pain relief.