Relieving PANDAS symptoms in Children with Non-Invasive Electro-stimulation

PTSD Protocol using Avazzia

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Objectives

To determine effectiveness of the Avazzia microcurrent:

- in reducing self-reported chronic pain levels of varying degrees in children recovering from PANDAS and other associated symptoms.

Data has not been reviewed by the FDA.

Methods

Participants

- 7 patients between ages of 9 and 16
- Diagnosis consistent with chronic pain and other symptoms and diagnoses including PANDAS
- Varied by gender and reported pain level

Principal Investigator

Dr. Cynthia Keller M.D.

Study Coordinator

Dr. Cynthia Keller M.D.

Equipment Used
Avazzia BEST-PRO 1™ Device

- Biofeedback Electrical Stimulation Technique (BEST), with micro-Pulse Electro Magnetic Fields (PEMFs).
- Trillions of cells; to function properly they need to talk to each other, the brain, the heart, and the outside world.
- Body communicates through electromagnetic frequencies. When these patterns or frequencies are disrupted, disharmony and disease can occur.
- Collagen as an information highway, follows acupuncture meridians.
- Injury, inflammation, and scar tissue, blocks info. PANDAS = brain inflammation.
- Avazzia unique – works with both A and C pain fibers. Acts as biofeedback device, has ability to break up inflammation, and monitors and treats based on body's response!

Can biofeedback electro-stimulation over specific acupuncture points, alleviate PANDAS symptoms & take kids out of "fight or flight?"

Centered in Wellness, Cynthia Keller M.D.

PANDAS SYMPTOMS

(Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal Infections)

Emotional/Intellectual

- OCD-like behavior
- Anxiety
- Focus, ADD/ADHD
- Moody, irritable
- Frequent meltdowns
- Impulsivity
- Sadness
- Unwanted obtrusive thoughts “get stuck”

Physical

- Sensory: food, texture, light
- Fine & gross motor skills
- Sleep difficulties
- Facial tics abnormal movements
- Physical aches, complaints

PTSD Protocol developed by

Pamela Shaw, PhD

Michael E. DeBakey, Veterans Affairs Medical Center

Stanley Wolfe, DVM

Private Practice

2007

Our Treatment Protocol

- 10 kids for 10 visits
- Strep under control, but sympathetic nervous system still engaged.
- Used PTSD treatment Protocol.
- Evaluated symptoms based on intensity and frequency using a point scale.

- Started with 10 children, 7 completed study.
- Lost 2 due to schedule conflict.
- 1 strep positive, still active PANDAS, Priority to treat infection.

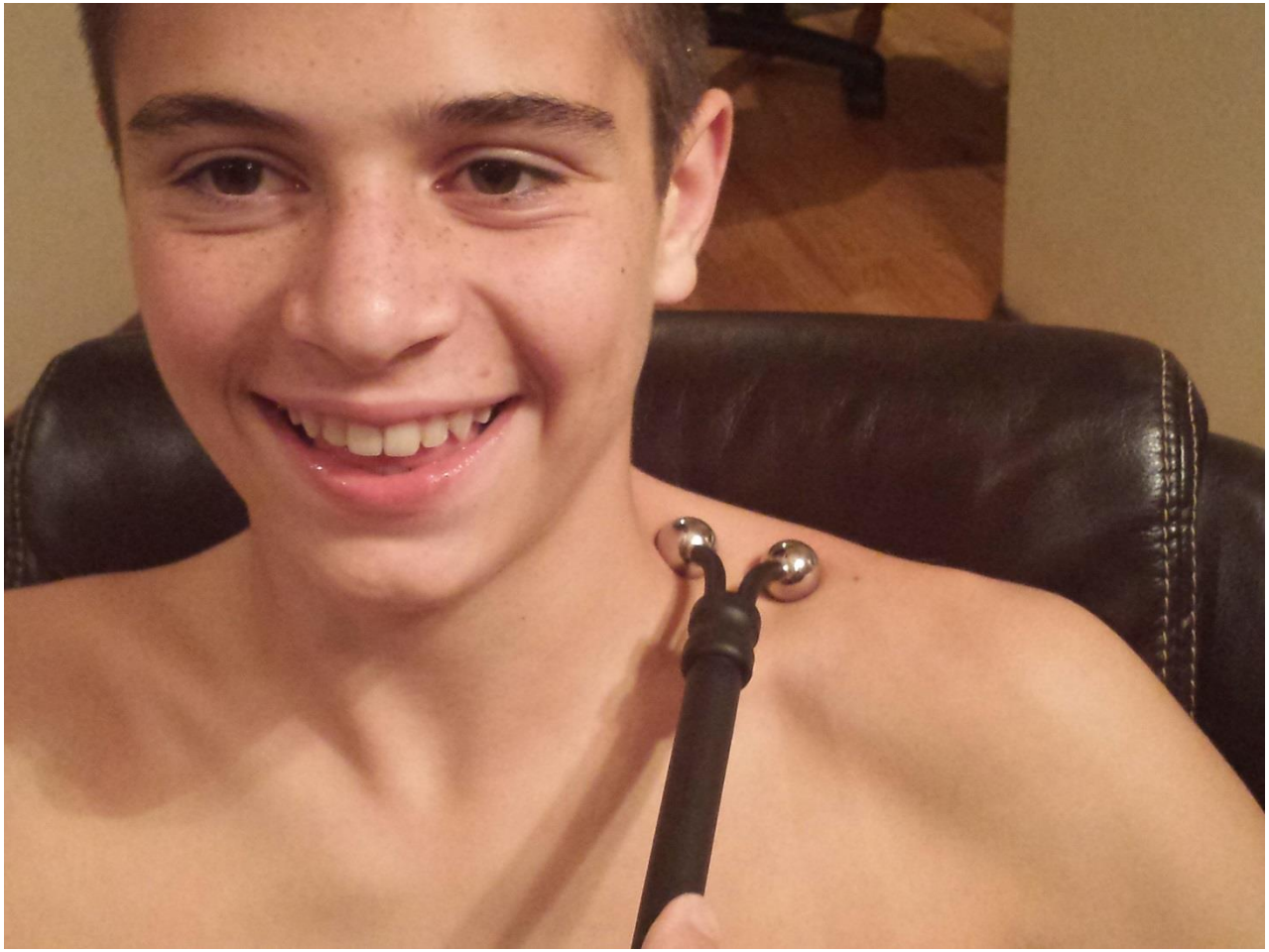
PTSD Protocol

Location to Treat	Mode settings	Treatment time
1. Little Wings on sternocleidomastoid	Acute	5 cycles
2. Kidney 5 and Spleen 9	Stimulate	3-5 minutes
3. Liver 13 and Pericardium 6 Inner Pass	Stimulate	3-5 minutes
4. Stomach 7 and Bladder 11	Stimulate	3-5 minutes
5. Governing Vessel 15 Mutes Gate and Governing Vessel 3 Lumbar Yang Pass	Stimulate	5-10 minutes

Treatments were repeated one time per week, for 10 visits

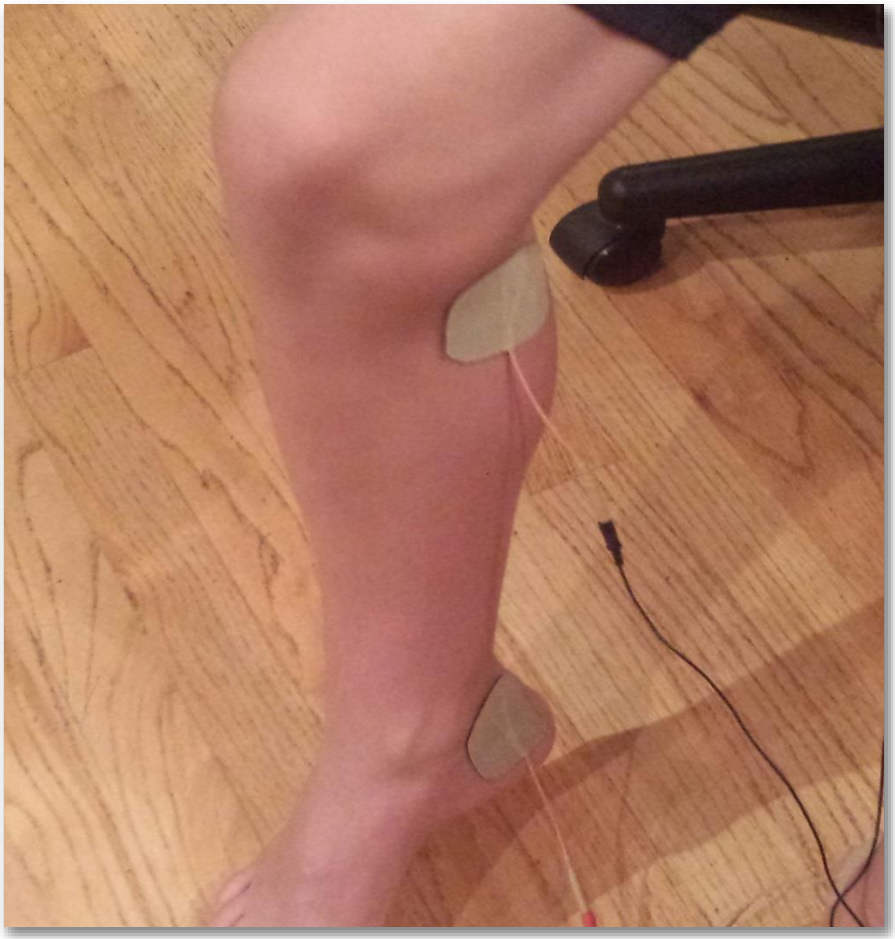
Protocol Oral electrolytes with Calcium

Step 1 “Little Wings”



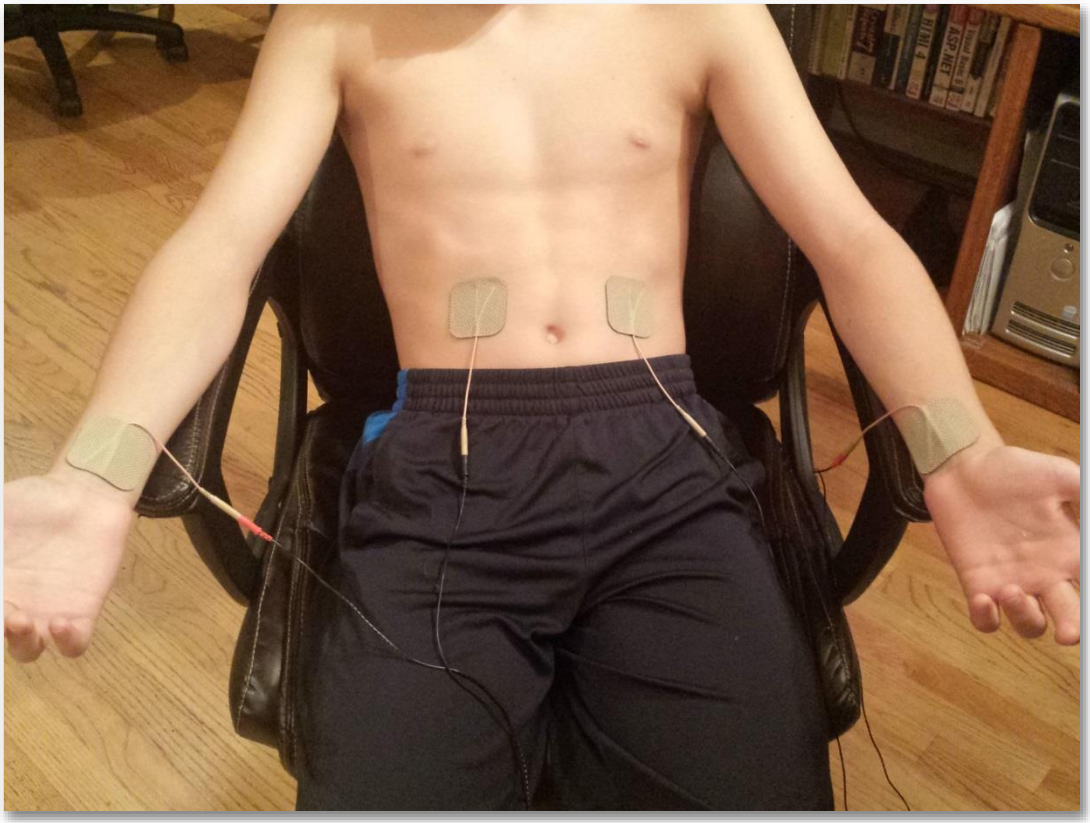
Step 2 and 3

Kidney 5 and Spleen 9



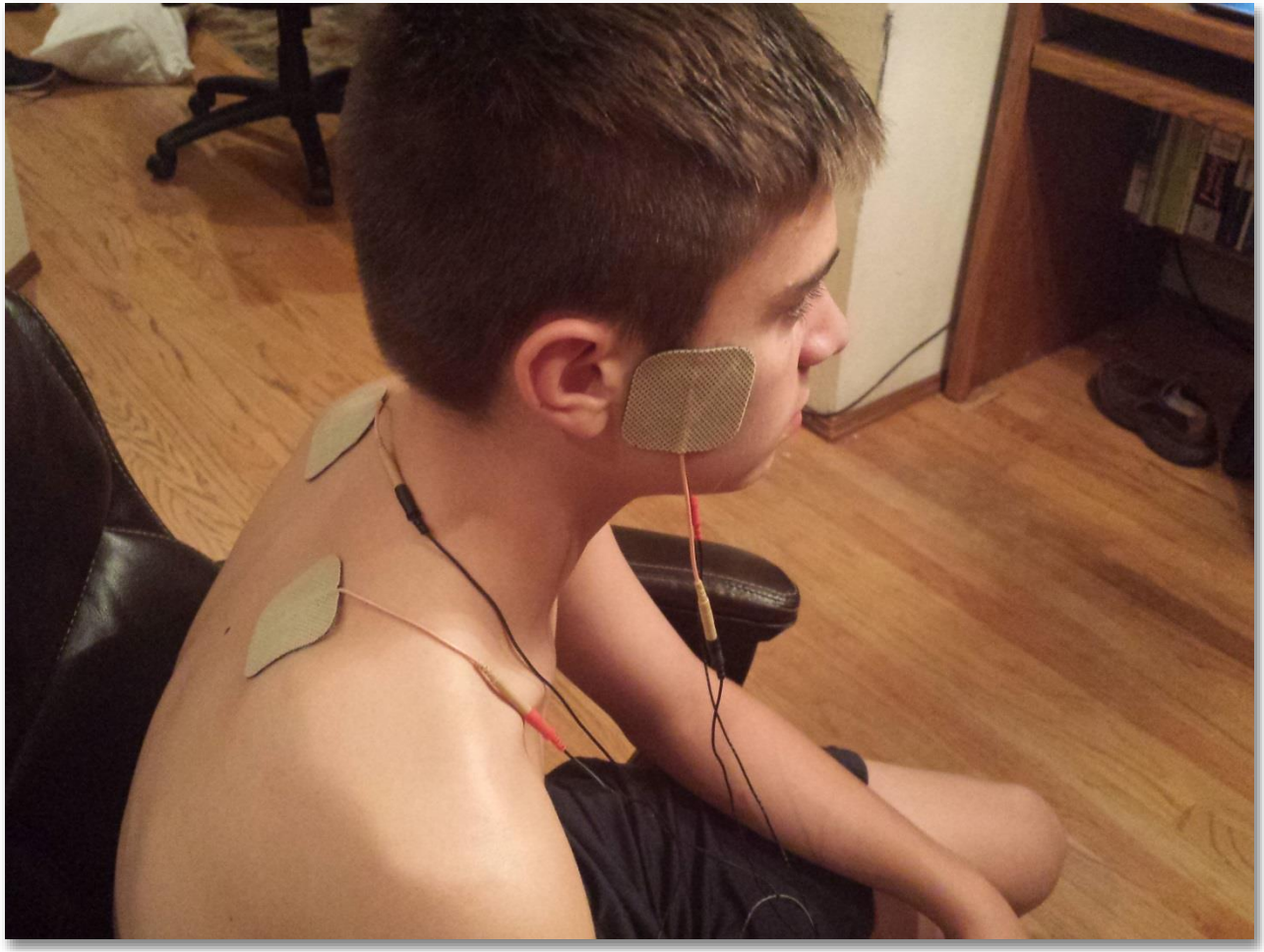
Step 4, 2 units Concurrently

Liver 13 and
Pericardium 6 Inner Pass



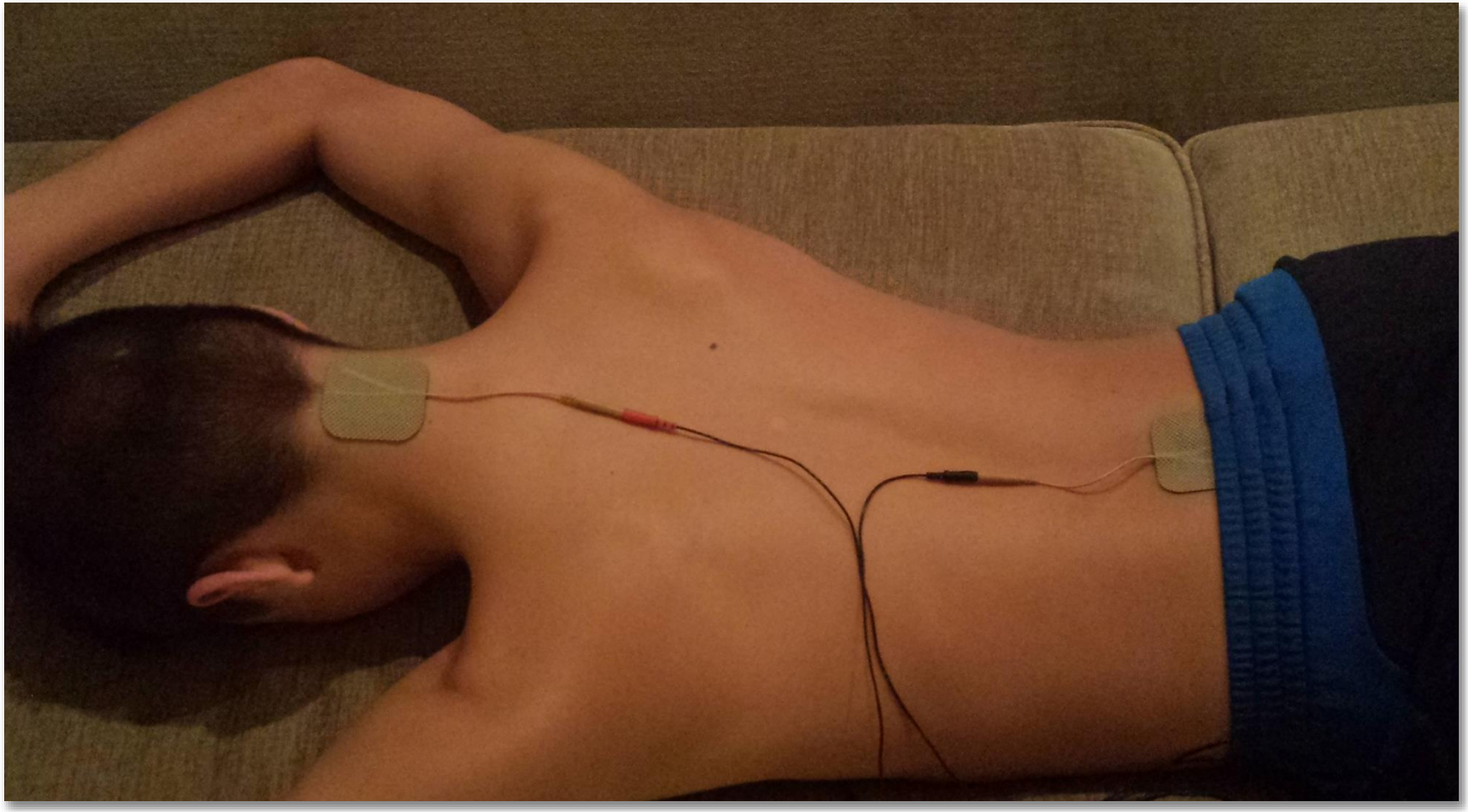
Step 5 and 6 done together

Stomach 7 and Bladder 11



Step 7 C1-C2 area & L3-L4 area

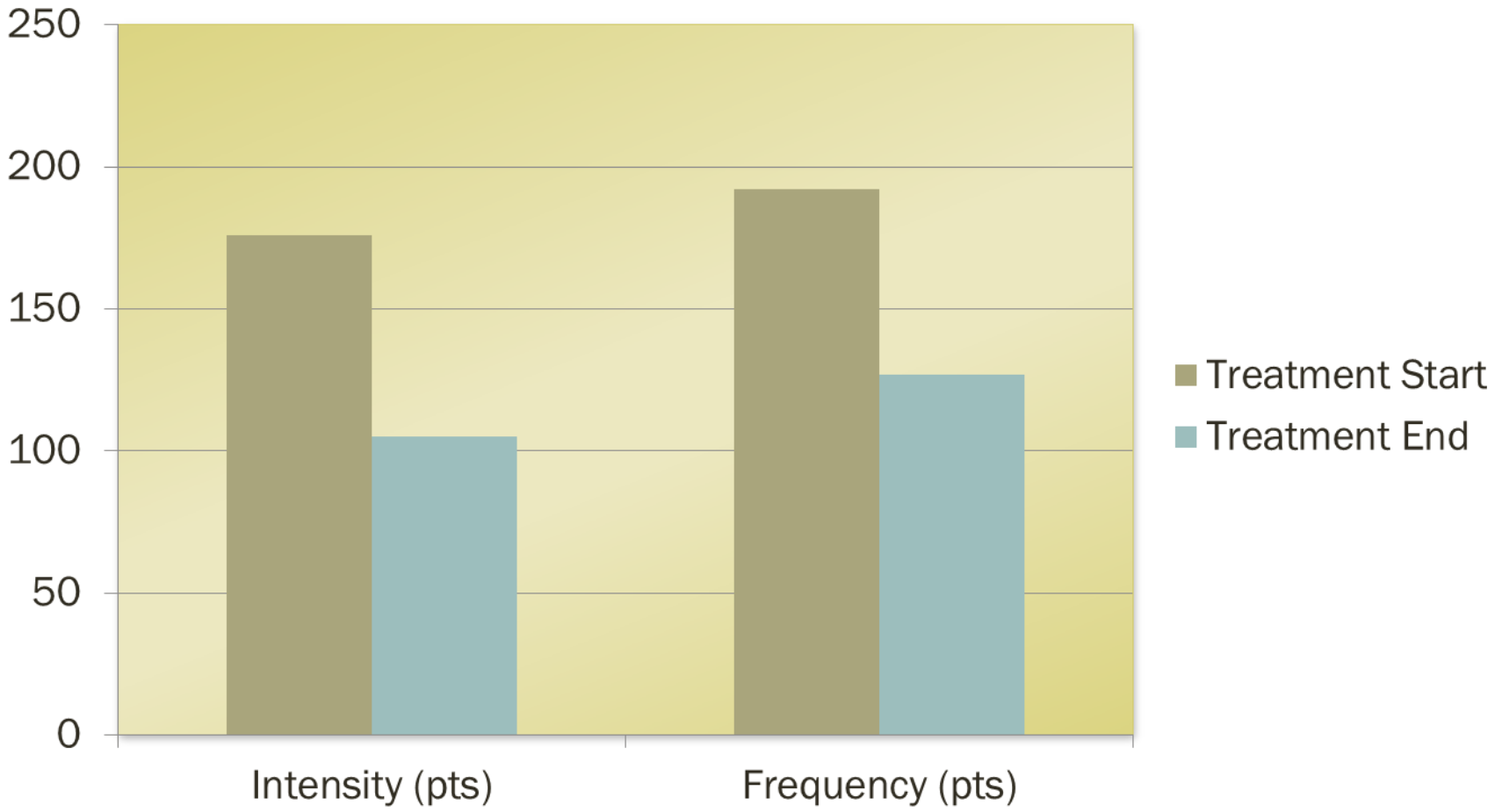
Governing Vessel 15 Mutes Gate and Governing Vessel 3 Lumbar Yang Pass



Clinical Findings

- Evaluated symptoms based on intensity and frequency, using a one-to-five point scale.
- Of the 7 who completed the study, the cumulative scores for **intensity of symptoms** at start were **176**, Dropping to **105** at study end **decreasing 71 points** or **40.3%**
- Scores for **frequency** went from **192 to 127**, decreasing by **33.9%**

Avazzia PTSD Protocol, Findings



Punchline

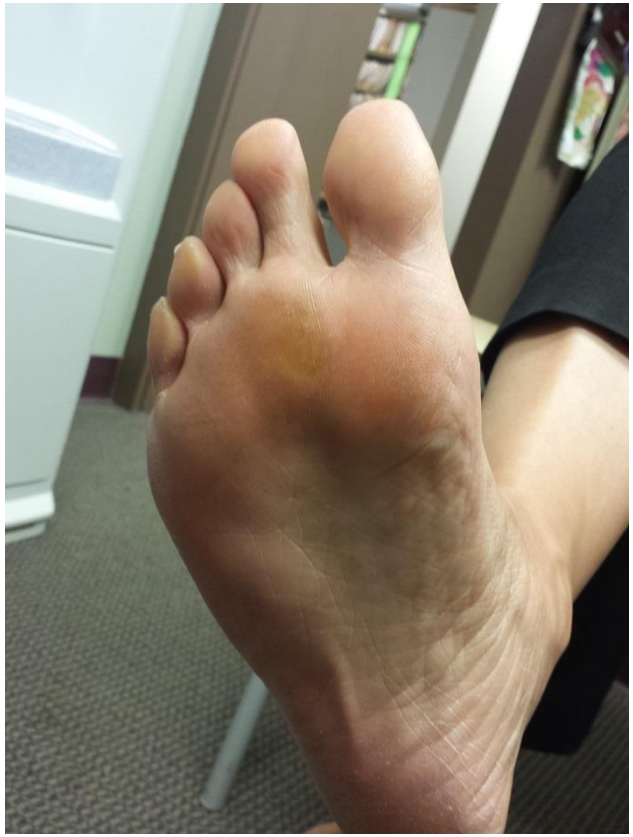
- This non-invasive, well-tolerated, easy to do therapy is successful in treating children with PTSD-like symptoms, as seen in post PANDAS, and carries over to other “stress disorders”
- All kids in the study exhibited physical symptoms such as aches, pain, headaches, muscle tension and pain in shoulders/neck, so protocol was compliant with FDA guidelines for Avazzia B.E.S.T units.
- EVERY child (and their parents) noticed significant changes in symptoms and their ability to cope with day to day living.
- It made such a difference, that they continue to be seen for “tune ups” when under stress, and continue to improve.

See What We are Doing Now!

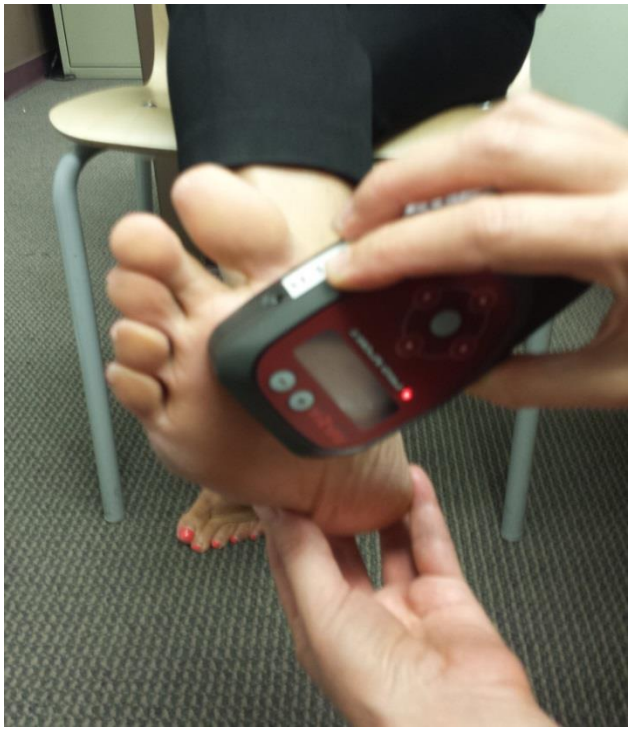
Cynthia Keller M.D , Angela Zappone RDH, Avazzia Clinician Centered in Wellness

Pain, Structural Influences

Bears weight center of pad of foot

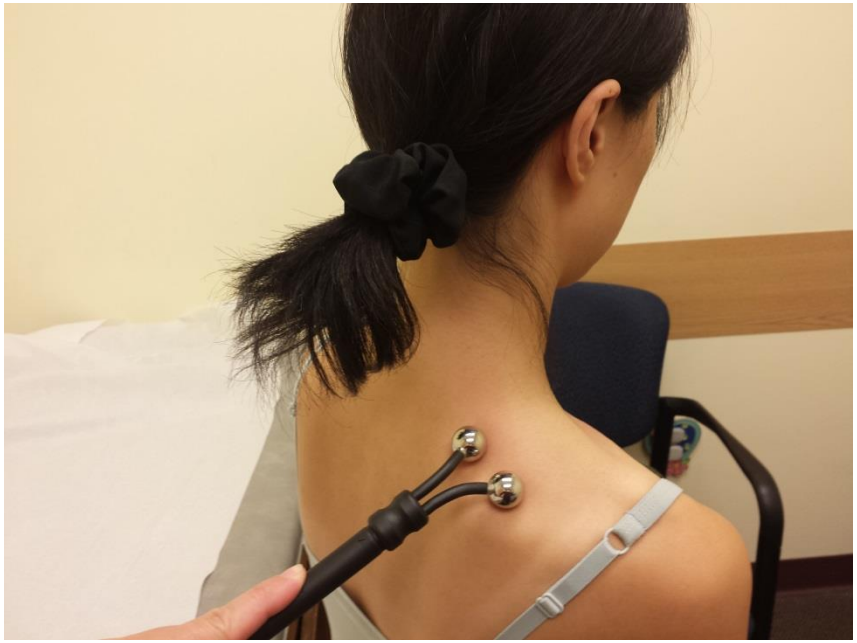


Completely alleviated after 3 visits!

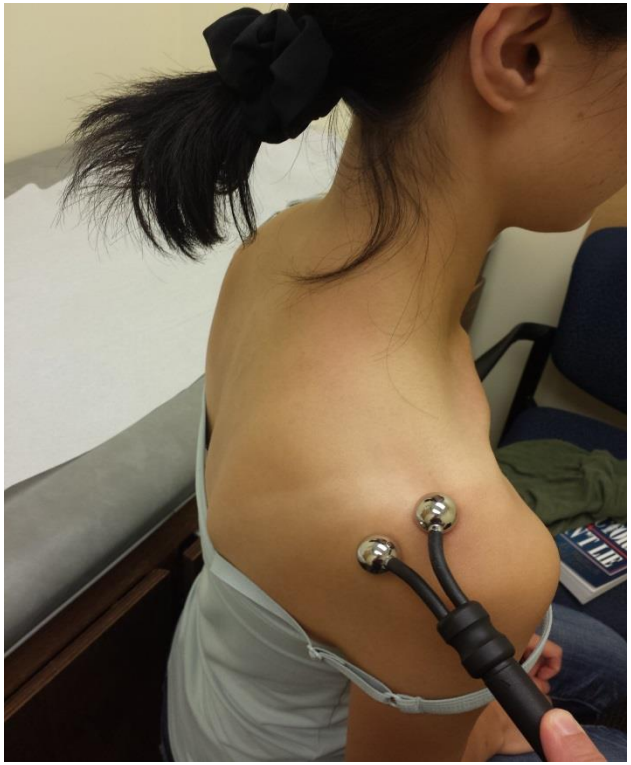


Chronic Pain. Past Injuries

Pain neck & shoulders, hx broken collar bone

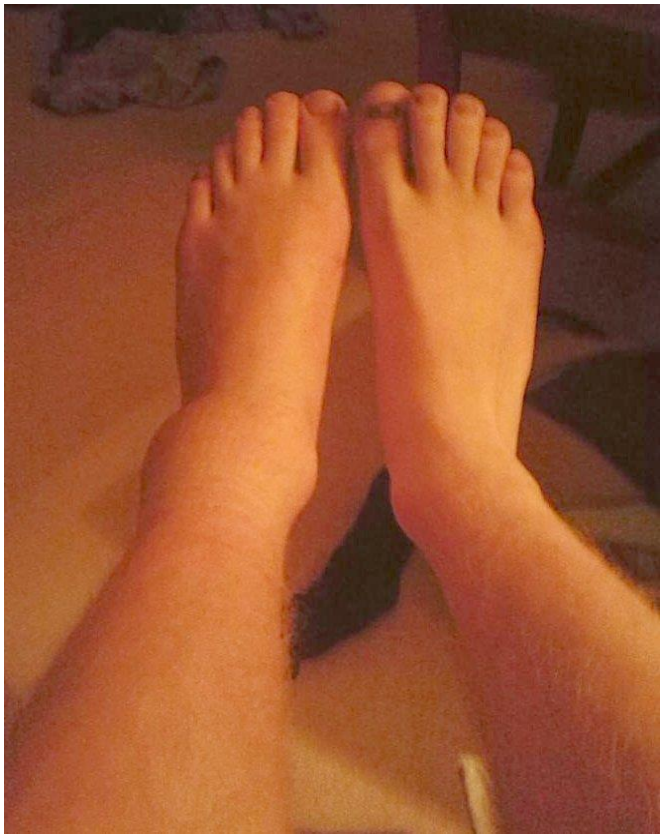


Treat pain/inflammation, scars. emotional factors contributing

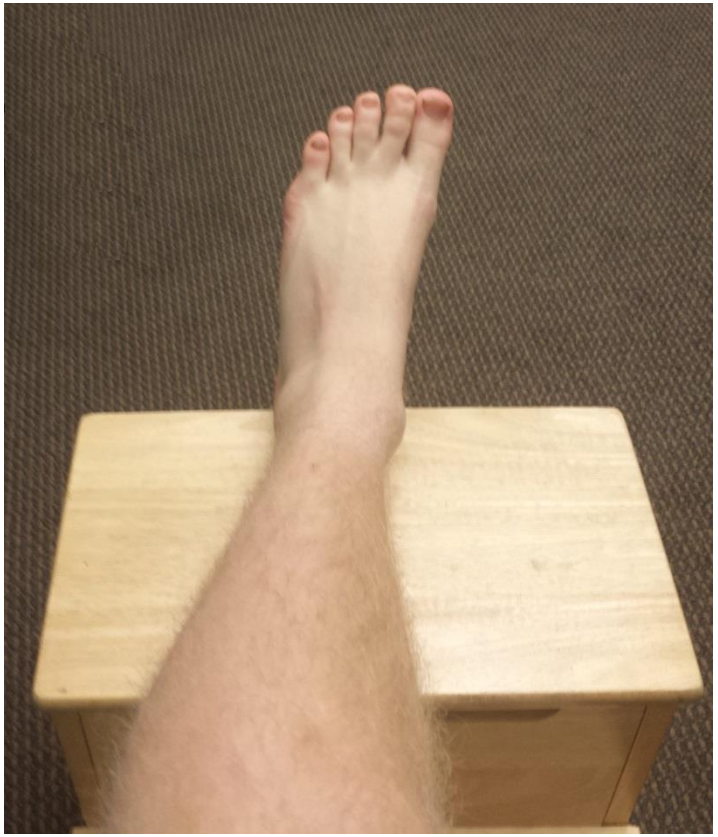


Ankle Sprain

Night of Injury

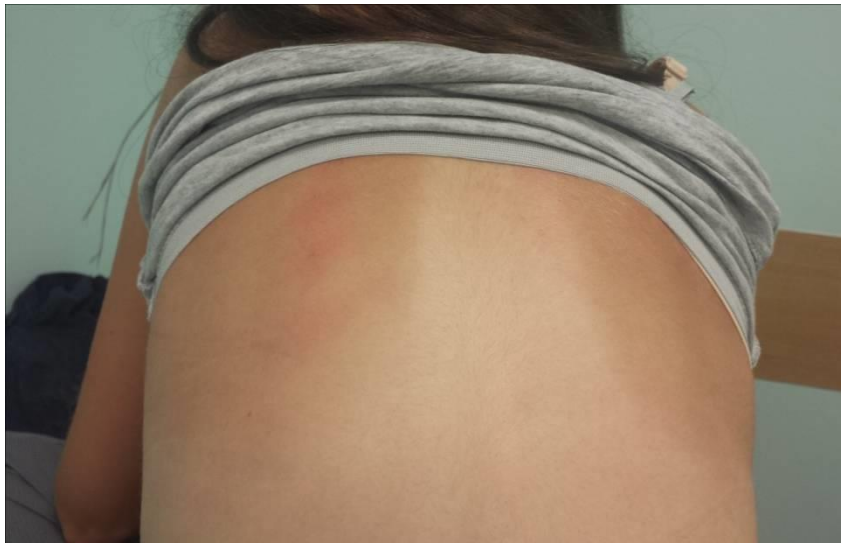


2 treatments/3 days after

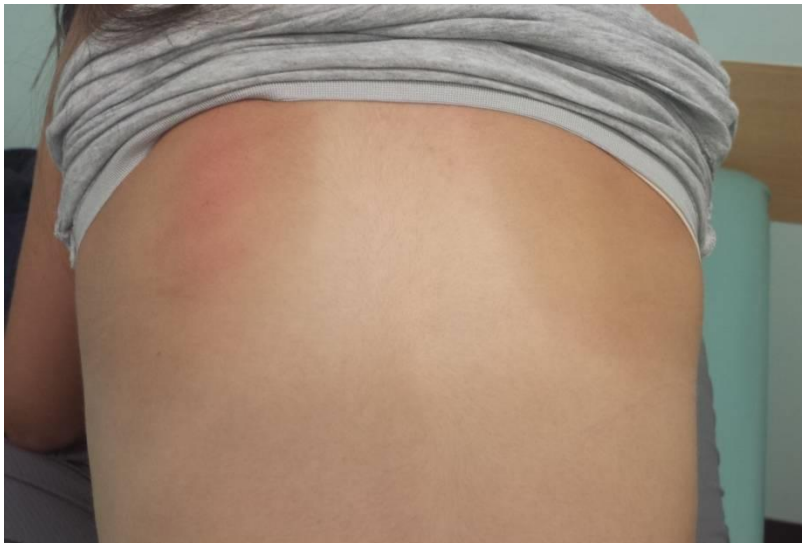


Post Pneumonia

First minute, initial signs of inflammation pop up



Red intensifies, pneumonia was much worse left lung



Avazzia BEST technology

PRO-SPORT

Moving Your Practice To Optimal Impact

- Premier microcurrent device
- Effective non-drug, non-invasive treatment for chronic and acute pain
- Engineered, manufactured and serviced in the U.S.
- 24 modes including 19 advanced modes; five modes and ability to program patient-specific modes
- Advanced engineering allows user to control power level, pulsing action, damping, modulation and more
- Level 1 and Level 2 training allows healthcare practitioners to learn best use practices

Conclusion

Data suggest that the Avazzia microcurrent electrostimulation device may reduce pain levels in patients with various degrees of chronic pain over a diverse pain population versus a single condition.

The statistically significant improvements in these treatments indicate there is a high probability (>90%) of these results being replicable over a larger pain population and an increased reduction of chronic pain with extended use.

However, sustainability of the beneficial effect over an extended period of time and larger population will need to be considered to further conclude the effectiveness of this treatment.

Disclosure of Compensation

Patient participants did not receive any compensation or product for participating.

Principal Investigators did not receive any compensation for participation in this study. They were provided with one BEST-PRO 1™ medical devices at no charge to perform the study from Avazzia.

Study Coordinator did not receive any compensation for participation in this study.

For more information, contact us at

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