

# HELPING PATIENTS WITH PAIN FROM PERIPHERAL NEUROPATHY (PPN) WITHOUT HARMING THEM

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**“Inadequate response to drug treatment constitutes an unmet need in patients with neuropathic pain”<sup>(1)</sup>**

## The Acceptable Standard of Care for PPN

Evidence based peer-reviewed double blinded placebo-controlled studies show that membrane stabilizing medication and Tricyclics are indicated.

Physician reviewer for an insurance company<sup>(2)</sup>

## Flaws in this Analysis

### SCIENTIFIC:

- 1) In a randomized placebo-controlled trial of 84 patients who received Pregabalin at 600 mg/day, 39% reduced their pain by 50% vs 15% for placebo ( $p=0.002$ ) and 38% had at least one adverse side effect<sup>(3)</sup>
- 2) Treatments available for (PPN) “do not relieve pain completely in the majority of patients and most have adverse side effects”.<sup>(4)</sup>
- 3) See reference (1)

### ETHICAL:

- 1) Real evidence based medicine makes the ethical care of patients its top priority and is characterized by expert judgement rather than mechanical rule following<sup>(5)</sup>
- 2) While the importance of randomized trials has been created by the concept of the hierarchy of evidence in guiding therapy, much of medical research is observational<sup>(6)</sup>

## An Alternative to Drug Treatment

Odell and Sorgnard (2008)<sup>(7)</sup> developed the concept that Electronic Signal Therapy (EST) would combat inflammation, stabilize cell membranes, increase cyclic AMP and improve circulation. When used with local anesthetics, they called it CET.<sup>(8)</sup>



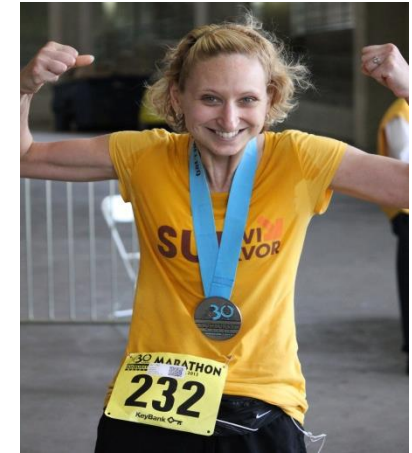
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## Peer Reviewed Evidence to Support CET

Of 98 patients who received on average of 17.6 CET treatments, 63% reduced their pain by 50% or more and only 2 minor adverse side effects were seen in over 1,700 treatments.

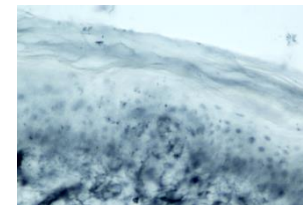
Case Study: A 34 year old with CIPN following chemotherapy for ovarian cancer. “I felt like I was walking on glass.” VAS was 7/10 pre treatment and 0/10 post treatment. She successfully ran a marathon 3 months after 17 CET treatments<sup>(9)</sup>



## Regenerating Nerves Destroyed by Neuropathy<sup>(10)</sup>

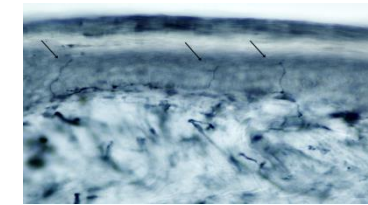
41 patients treated with CET at 3 different clinics had Epidermal Nerve Fiber Density (ENFD) biopsies done pre and post treatment as well as checking their VAS pre and post CET. 30 of 41 (73%) had some nerve regeneration and 34 of 41 (83%) reduced their pain by at least 50%. None had any adverse side effects.

0.0 Nerves/mm  
(>3.0/mm)



Pre CET Biopsy 8/14/13

3.4 Nerves/mm  
(>3.0/mm)



Post CET Biopsy 5/13/14

## Conclusions

Randomized placebo-controlled double blinded trials have shown that Drug Therapy for PPN gives inadequate response because they “do not relieve pain completely in the majority of patients and most have adverse effects”. Observational studies show that as compared to the 38% of pregabalin treated patients who reduced their pain by 50% between 62% and 113% of the CET treated patients reduced their pain by 50%. None had significant adverse side effects, and up to 73% who receive CET regenerated their epidermal nerves. **This analysis leads to the question: What can WIP, its members, and the pain community do to make CET the Accepted Standard of Care for PPN?**

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