

Calmare therapy: Scrambler therapy (Calmare® therapy) is highly effective in the treatment of pain and has long-lasting effects, which is an important benefit for both physicians and their patients.

Clinical studies have shown that the technology successfully reduces pain in over 80% of treated patients without the adverse side effects commonly associated with drugs, therefore providing patients with a markedly improved quality of life and pain relief.

Calmare is an FDA-cleared device proven to reduce pain in 80% of patients in clinical trials. It's non-invasive and drug-free, with no known side effects of opioid drugs and other drugs often prescribed for pain.

The Calmare® device uses a biophysical rather than a biochemical approach. A 'no-pain' message is transmitted to the nerve via disposable surface electrodes applied to the skin in the region of the patient's pain. The perception of pain is canceled when the no-pain message replaces that of pain, by using the same pathway through the surface electrodes in a non-invasive way. Regardless of pain intensity, a patient's pain can be completely removed for immediate relief.

Maximum benefit is achieved through follow-up treatments. The patient may be able to go for extended periods of time between subsequent treatments while experiencing significant pain control and relief. The period of time between treatments depends on the underlying cause and severity of the pain in addition to other factors.

Scientific Articles, Case Reports, Review Publications and Randomized Controlled Trial on Calmare therapy treating numerous Pain conditions:

Marineo G. [Inside the Scrambler Therapy, a Noninvasive Treatment of Chronic Neuropathic and Cancer Pain: From the Gate Control Theory to the Active Principle of Information.](#)

Integr Cancer Ther. 2019 Jan-Dec;18:1534735419845143. doi: 10.1177/1534735419845143. PMID: 31014125; PMCID: PMC6482660. Marineo G.

[Untreatable pain resulting from abdominal cancer: new hope from biophysics?](#) JOP. 2003 Jan;4(1):1-10. PMID: 12555009. **A**

Pilot Randomized Sham-Controlled Trial of MC5-A Scrambler Therapy in the Treatment of Chronic Chemotherapy-Induced Peripheral Neuropathy (CIPN)

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<https://doi.org/10.1177/0825859719827589->
Clinical Trial J Pain Symptom Manage

2010 Dec;40(6):883-91. doi: 10.1016/j.jpainsymman.2010.03.022.

Pilot trial of a patient-specific cutaneous electrostimulation device (MC5-A Calmare®) for chemotherapy-induced peripheral neuropathy

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PMCID: [PMC4383258](#)

DOI: [10.1016/j.jpainsymman.2010.03.022](#)



An exploratory study on the effectiveness of “Calmare therapy” in patients with cancer-related neuropathic pain:

A pilot study

Author links open overlay panel Sang Chul Lee ^{a 1}, Keun Suk Park ^{a 1}, Jee Youn Moon ^a, Eun Jung Kim ^a, Yong-Chul Kim ^a, Hyejin Seo ^a, Joon Kyung Sung ^a, Da Jeong Lee ^b
<https://www.painphysicianjournal.com/current/pdf?article=NzU0OQ%3D%3D&journal=147>

Efficacy of Scrambler Therapy for Management of Chronic Pain:

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Korea; 3 Cancer Epidemiology Branch, Division of Cancer Data Science, Research Institute, National Cancer Center, Goyang, Republic of Korea; 4 Department of Family Medicine and Center for Cancer Prevention and Detection, Hospital, National Cancer Center, Goyang, Republic of Korea Address Correspondence: Seung-Kwon Myung, MD, PhD 323 Ilsan-ro, Ilsandong-gu Goyang, Gyeonggi-do 10408, Republic of Korea E-mail: msk@ncc.re.kr Disclaimer: There was no external funding in the preparation of this manuscript. Conflict of interest: Each author certifies that he or she, or a member of his or her immediate family, has no commercial association (i.e., consultancies, stock ownership, equity interest, patent/ licensing arrangements, etc.) that might pose a conflict of interest in connection with the submitted manuscript. Manuscript received: 01-21-2022 Revised manuscript received: 05-05-2022 Accepted for publication: 06-02-2022 Free full manuscript: www.painphysicianjournal.com Yehun Jin, MD^{1,2}, Daehyun Kim, MD, PhD^{1,2}, Jangho Hur, MD, PhD¹, and Seung-Kwon Myung, MD, PhD²⁻⁴

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PMCID: PMC6531072 PMID: [31096512](https://pubmed.ncbi.nlm.nih.gov/31096512/)

Scrambler therapy for the treatment of diabetic peripheral neuropathy pain

A case report

[Yeon Sil Lee](#), MD, [Min Ki Park](#), MD, [Hahck Soo Park](#), MD, PhD, and [Won-Joong Kim](#), MD, PhD, FIPP, CIPS*Scrambler therapy is effective for the treatment of diabetic peripheral neuropathy. Moreover, effective pain management can be achieved for patients who complain of general pain of the sole, including the toe, by attaching scrambler patches around the ankle.

[Medicine \(Baltimore\)](#). 2023 Sep 29; 102(39): e35357.

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PMCID: PMC10545242

PMID: [37773810](https://pubmed.ncbi.nlm.nih.gov/37773810/)

Efficacy of scrambler therapy in patients with painful diabetic peripheral neuropathy: A single-arm, prospective, pilot study

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In conclusion, our preliminary data suggest that ST appears to be beneficial for the treatment of painful DPN. A small cohort of patients who have not previously responded to pharmacotherapy respond to ST with short-term pain relief. Although further studies with a larger patient sample are needed to validate our preliminary findings and long-term efficacy, ST may be a treatment option in patients who do not respond to “primary treatment” for painful DPN. In addition, further research is needed to investigate the mechanism of action of ST, which may provide further data on the pathophysiology of DPN.

Scrambler Technology Life Changing for Many Patients with Neuropathic Pain

The Scrambler device disrupts this pain cycle. Using electrodes similar to the ones used for EKG that are carefully placed near the area(s) of pain, the device produces small electrical currents. The currents activate C fibers, producing non-pain signals that override native pain-generating signals. Over the course of multiple treatments, the brain becomes accustomed to experiencing the non-pain signals instead of the pain signals.

“The therapy essentially retrains the brain to feel new signals created by the device instead of feeling pain signals,” explains [Renato Samala, MD](#) of Cleveland Clinic Cancer Institute’s Palliative and Supportive Care department. “This can really improve a patient’s quality of life.”

Differential response to scrambler therapy by neuropathic pain phenotypes

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[Yoon-Ho Hong](#)

Scrambler therapy is a noninvasive electroanalgesia technique designed to remodulate the pain system. Despite growing evidence of its efficacy in patients with neuropathic pain, little is known about the clinical factors associated with treatment outcome. We conducted a prospective, open-label, single-arm trial to assess the efficacy and safety of scrambler therapy in patients with chronic neuropathic pain of various etiologies. A post-hoc analysis was performed to investigate whether cluster analysis of the Neuropathic Pain Symptom Inventory (NPSI) profiles could identify a

subgroup of patients regarding neuropathic pain phenotype and treatment outcome. Scrambler therapy resulted in a significant decrease in the pain numerical rating scale (NRS) score over 2 weeks of treatment (least squares mean of percentage change from baseline, - 15%; 95% CI - 28% to - 2.4%; $p < 0.001$). The mean score of Brief Pain Inventory (BPI) interference subdimension was also significantly improved ($p = 0.022$), while the BPI pain composite score was not. Hierarchical clustering based on the NPSI profiles partitioned the patients into 3 clusters with distinct neuropathic pain phenotypes. Linear mixed-effects model analyses revealed differential response to scrambler therapy across clusters ($p = 0.003$, pain NRS; $p = 0.072$, BPI interference subdimension). Treatment response to scrambler therapy appears different depending on the neuropathic pain phenotypes, with more favorable outcomes in patients with preferentially paroxysmal pain rather than persistent pain. Further studies are warranted to confirm that capturing neuropathic pain phenotypes can optimize the use of scrambler therapy.

Review

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