

SCRAMBLER THERAPY

(Calmere Therapy / Neuroplastic Therapy)

Scrambler Therapy is a non-invasive, painless (or minimal discomfort) medical therapy that is performed in an Outpatient Clinic.

This primarily helps patients experiencing chronic/persistent neuropathic pain of any cause. Some examples include but not limited to the following: CRPS (Complex Regional Pain Syndrome), post chemotherapy induced peripheral neuropathy, chronic post-surgical pain, post-herpetic neuralgia, post-operative sciatica, persistent spinal pain syndrome and other associated nerve pain, other causes of neuropathic pain.

WHAT HAPPENS AT A SCRAMBLER THERAPY SESSION?

Electrodes similar to ECG pads are placed on the skin. A stimulator cable is attached to 2 of these pads. Up to 5 cables, are attached to the Scrambler machine (MC-5A scrambler) and to a maximum of 10 pads. The number of cables required depends upon the individual patient and their diagnosis.

The electrodes are placed above and below the area of pain but not at the site of pain. Each electrode is turned on and a response to stimulation must be relayed to the physician operating the machine. Initially patients may experience a slight "mild bee sting" like sensation. This should settle in a matter of seconds. Thereafter patients will feel a "buzzing or tingling" sensation that should not be painful. If it is painful, patients should tell the doctor/nurse and the site of electrode placement may need to be changed to a different position. The stimulation will change frequently using an algorithm set by the Scrambler machine.

Once the optimal electrode placements are satisfactory, the therapy will proceed for 30 to 40 minutes. The total time for each session is about 1 hour. Patients must commit to attending 10 consecutive daily sessions (excluding weekends).

In the initial sessions, patients should feel pain relief ranging for several hours. With each session, the duration of pain relief should be longer. By about the 7th to 8th session, pain levels should have reduced more than 70% to 80%. After 10 sessions, if the treatment sessions are successful, there should be significant reduction in pain relief for several months or longer. If there is a recurrence of pain, patients can have 1 to 5 "booster" therapy sessions.

Scrambler therapy does not help everyone. It may not be effective, or the placement of the electrodes may have been incorrect. If there is no benefit within the first 3 sessions the Scrambler therapy will be abandoned.

HOW DOES SCRAMBLER THERAPY WORK?

Chronic pain is caused by constant irritation of small nerve fibres that transmit impulse to the spinal cord and thereafter to mid-brain and cerebral cortex (main brain). There is a constant "loop" between the site of pain and interpretation by the brain. During this process there are changes in pain pathways (neuroplasticity).

Non-painful "C-fibre" stimulation away from the painful site/s, sends painless messages to the brain, thereby "scrambling" or altering the pain messages and interrupting pain signals. In other words, we are creating neuroplastic change to the nervous system and creating a "painless loop" that retrains and re-wires the brain and nerve transmission and to change the perception to pain.

HOW DOES THIS COMPARE WITH TENS?

TENS stimulates large sensory fibres at high amplitude at the site of pain. There is no variation of impulse or stimulation algorithm and after a period (minutes) it is often ineffective. Once the TENS is switched off, pain returns. TENS is self-administered. Scrambler Therapy is conducted by a Pain Physician. The mechanism of action is different and more complex.

IS THIS THERAPY WIDELY AVAILABLE?

Professor G Marineo initiated the science and clinical practice of this therapy about fifteen years ago in Rome, Italy. After refinement it became available in several countries in Europe and in the last 5 years in the USA, Korea and Japan. This therapy is currently being used at the Mayo Clinic, Johns Hopkins University Hospital and several other major teaching hospitals in the USA. The American defence force hospitals use this therapy for injured soldiers.

WHAT IS THE SUCCESS RATE?

From the information to date, about 70% to 80% of patients undergoing this therapy have been very happy. It has improved their life in general, with minimal or no more medications and improved emotional state of mind. It may not be suitable for all pain sufferers. Selection criteria, cause of pain, technical aspects of the therapy play a part in outcome.

IS THIS COVERED BY MEDICARE, HEALTH FUNDS OR WORKERS COMPENSATION?

It is not currently covered by Medicare or Private Health funds. Worker Compensation, Motor Accident Insurers and Department of Veteran's Affairs will consider funding this therapy.

WHAT HAPPENS TO MY CURRENT MEDICATIONS?

Ideally, patients should be weaned off anticonvulsant and antidepressant medications, because they tend to interfere with scrambler therapy and may delay a successful result. High dose opioids need to be reduced significantly. Your pain physician will discuss any medication changes with you.

ARE THERE ANY SIDE EFFECTS?

There are no known side effects. This is a major advantage.

ARE THERE SOME PATIENTS WHO CANNOT RECEIVE THIS THERAPY?

Yes. Patients with the following may not be suitable for Scrambler Therapy:

Implanted pacemakers	Skull plates	Vena cava clips
Aneurysm clip	Brain injury sufferers	Unstable/untreated mental health
Recent myocardial infarction	Pregnant or breast feeding	Epileptics

Implanted Spinal and peripheral stimulators need to be turned off during a treatment session.

A full assessment is required to determine the suitability and potential risks for patients with the above conditions.

WANT MORE INFORMATION?

Visit: <https://thenewdaily.com.au/life/2023/08/04/possible-cure-for-chronic-pain/>

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