

SCENAR for Pain Relief & Chronic Illness (p.26-27)

By Dr. med. Jörg Prinz

Ever since the SCENAR device was made popular in the western world through the teachings of Chris Mortensen [¹] from the RITM SCENAR Institute in Sydney, patients and practitioners are equally amazed how fast and effectively this little device can change patients' lives to the better.

A SCENAR device is basically a TENS machine and registered under FDA, TGA and MedSafe as such for pain relief. SCENAR stands for Self Controlled Energo Neuro Adaptive Regulator. The device applies electric impulses through the skin like a TENS device (Transcutaneous Electric Nerve Stimulator). And this is basically where the comparison between a TENS and a SCENAR device ends.

In Russia, where the device was invented in the 70s and 80s, the use is far more widespread – and it is used to treat chronic illness even if these illnesses are not associated with pain. The SCENAR Library [<http://elib.scenar.com.ru>] stores many research papers describing clinical trials to the effectiveness of SCENAR treatments. Some of the results as collected by Yuri Gorfinkel [²] are amazing and hard to believe from a western medical point of view.

This article explains by implication the possible pathways how SCENAR applications can achieve such amazing results. After all: medicine is an empiric science which means that doctors observe a phenomenon, construct a model – and then try to imitate the effects with a treatment in order to achieve the same effects on other patients.

Many studies have been done about effects of electricity on the body. There are currently (Feb 2014) more than 6000 research papers listed in PubMed (US National Library of Medicine National Institutes of Health) about Transcutaneous Electric Nerve Stimulation alone.^[3, 4]

Like a TENS device SCENAR sends electrical impulses into the skin. The depth of penetration is about 2-5 mm. The SCENAR impulse has been modelled like a human nerve impulse [⁵]: while the TENS impulse is a square or triangular impulse the SCENAR impulse is a bipolar impulse. Using an electric impulse that a human body is already familiar with has the advantage that it makes 'sense' to the body and reacts immediately to it.

The bipolar SCENAR impulse stimulates very effectively C-nerve-fibres [⁶]. These are non-myelinated nerve fibres which are hard to stimulate by mono-polar electrical impulses. When C-fibres are stimulated effectively they release endorphins which explains the fast and effective pain relief that SCENAR application is known for – and a large number of other neuropeptides which effectively stimulate the body to heal.

Traditionally TENS is applied with sticky electrodes to the skin over the point/area of pain. While the TENS device is running there is usually a pain relief that lasts for 15-30 minutes after the end of the treatment. While SCENAR can be applied through sticky pads SCENAR is

¹ Chris Mortensen: Professional RITM SCENAR Training, Level I, II & III; RITM SCENAR Institute, Australia 2003

² Dr. Yuri Gorfinkel: SCENAR Philosophy. <http://www.mediscen.ca/Scenar%20Philosophy.pdf> © 2001 Dr. Irina Kossovskaja

³ Nnoaham KE, Kumbang J.: Transcutaneous electrical nerve stimulation (TENS) for chronic pain. Cochrane Database of Systematic Reviews 2008, Issue 3, Art. No.: CD003222. DOI: 10.1002/14651858.CD003222.pub2.

⁴ Walsh DM, Howe TE, Johnson MI, Moran F, Sluka KA.: Transcutaneous electrical nerve stimulation for acute pain. Cochrane Database of Systematic Reviews 2009, Issue 2, Art. No.: CD006142. DOI: 10.1002/14651858.CD006142.pub2.

⁵ Unakafov, M: 'The SCENAR Impulse', Presentation at SCENAR Conference 2012, Katoomba, Australia

⁶ Scherer, U. & Engelbert, Ch.W.: SCENAR Medizin, Lehrbuch und Therapieatlas, Styx Verlag, 2007

usually applied while moving the device over the skin ('brushing') or in a pattern according to elaborate treatment protocols designed by the Russian medical team who were involved in the development and testing of the SCENAR device. The treatment area though does not necessarily have to be the area of the complaint.

When 'General Zones' are treated it relaxes the patient – an effect due to the influence on the autonomous nervous system (ANS). Applications on 'Horizontal Zones' influence cutaneous branches of the spinal nerves and different nerves on the limbs. 'Reciprocal Zones' are an often observed but hard to explain phenomenon that is also used in SCENAR application. 'Reflexogenic Zones' are described in medical teachings, too: Head Zones (after Sir Henry Head) [^{7, 8, 9}] are skin areas (on front and back of the trunk) that correspond with internal organs and are more sensitive (allodynia) when the organ is diseased. These areas can be treated with SCENAR to positively influence the organ function.

Professor (emeritus) Han of the Beijing Medical University dedicated his life's work to 'scientifically explain the effectiveness of acupuncture [^{10, 11}]. It was Han who discovered that acupuncture releases endorphins into the area of pain as well as into the cerebro-spinal fluid. He described in his research papers that electro-acupuncture and TENS application on acupuncture points are more effective than traditional acupuncture. Han demonstrated a connection between the frequencies of the impulse and the type of endorphin being released. By using high and low frequencies (120 to 2 Hz) generated by a standard TENS device he could achieve a fast appearing and a longer lasting pain relief. Han and others also researched acupuncture points and found a great number of differences to non-acupuncture points. Cabioğlu & Cetin [¹²] found: "There are increased structures of capillaries, symphatic nerve endings, dermal papillas and electrolyte embedded sites with condensed gap junctions in epidermis at the acupuncture points, so that they possess different electrical potentials than nearby sites." That makes SCENAR application a needleless acupuncture treatment.

As SCENAR application protocols cover a lot of acupuncture points and meridians AND transcutaneous stimulation of those points are more effective than traditional acupuncture one can easily conclude that SCENAR application can positively influence the same illnesses as acupuncture itself can influence. Using a bipolar impulse that imitates a human nerve signal the effects of a SCENAR are even more pronounced. In 1996 The World Health Organisation (WHO) accepted a report by Dr. Xiaorui Zhang [¹³] about the complementary and stand-alone use of acupuncture for a long list of conditions.

There is another aspect of SCENAR application: A SCENAR device is also a bio-feedback device [¹⁴]. When the SCNEAR is touching the skin the device registers the skin impedance

⁷ Head H: On disturbances of sensation with especial reference to the pain of visceral disease. Brain, vol. 16, pp. 1–133, 1893.

⁸ Head H: On disturbances of sensation with especial reference to the pain of visceral disease. Part II—head and neck. Brain, vol. 17, pp. 339–480, 1894.

⁹ Head H: On disturbances of sensation with especial reference to the pain of visceral disease. Part III—pain in disease of the heart and lungs. Brain, vol. 19, pp. 153–276, 1896.

¹⁰ Wang J, Mao L, Han JS (1992a): Antinociceptive effects induced by electroacupuncture and transcutaneous electrical nerve stimulation in the rat. Int J Neurosci 65:117–129.

¹¹ Ulett GA, Han S, Han JS. Electro acupuncture: mechanisms and clinical application. Biol Psychiatry. 1998 Jul 15;44(2):129–38.

¹² Mehmet T. Cabioğlu: Acupuncture and Immunomodulation. The American Journal of Chinese Medicine, Vol. 36, No. 1, 25–36, 2008

¹³ Dr Xiaorui Zhang, Acting Coordinator Traditional Medicine (TRM), Department of Essential Drugs and Medicines Policy (EDM), World Health Organization: Acupuncture: Review and Analysis of Reports on Controlled Clinical Trials. <http://apps.who.int/medicinedocs/pdf/s4926e/s4926e.pdf>

¹⁴ Grindber Y.: SCENAR technology. Scenar-therapy and Scenar-expertise: Collection of

(electrical resistance) below the electrode. The SCENAR signal' shape is constantly changed according to these measurements. The device gives an audible signal once the computed 'given value' is reached. Applying the SCENAR gives a strong signal from the point of pain to the brain, overriding the chronic pain signal. The brain can now stimulate the painful site to correct the condition. This type of biofeedback is called reflex biofeedback because the conscious mind is not part of the correcting feedback loop.

Another point with regard to SCENAR application is the massage. Manual therapies like massages are long been accepted into medical practise. While the SCENAR device is applied to the body using the brushing technique (moving the device across the skin) the practitioner is delivering a 'vibrational massage' to the client. The humming sound - as discovered by Russian doctors – is produced by the vibration of the skin [¹⁵]. According to Melzack and Wall (Pain Gate Theory 1965) [¹⁶] the nerve impulses from rubbing the skin override the ones from the pain signal and so suppress the pain. Using the SCENAR brushing the skin and stimulating the nerves therefore works in two ways to reduce pain.

Apart from pain relief and the almost immediate restoration of bodily function (e.g. joint movements, activation of bowel movements and the like) SCENAR practitioners observe the calming effects of the SCENAR application and the regulation of functions of the autonomous nerve system [¹⁷]. Relaxation and good sleep is an often reported phenomenon after SCENAR treatment – especially when applied to the back – in closer proximity of the sympathetic ganglions. Anxious and depressed patients –regardless if they have primary or secondary anxiety or depression – benefit well from SCENAR treatments.

It has been shown that SCENAR improves circulation in the treatment area and thereby explains why degenerative conditions improve. And we observe anti-inflammatory effects with the SCENAR treatments. Acute swellings after injury respond well to SCENAR. Some German hospitals use SCENAR routinely to apply it on fractures ankles to reduce the time to operation by 3-4 days in average [¹⁸].

Pain and inflammation in patients with Crohn's disease react well to SCENAR application on the abdomen[¹⁹].

With all the knowledge of the possible mechanisms of SCENAR application Russian medical doctors apply SCENAR to almost any medical condition and regularly report about their successes in acute medicine (e.g. routinely use of SCENAR for pain relief in ambulances and in emergency departments) and chronic illnesses. The list of chronic condition they successfully tackle with SCENAR is long and the results are impressive.

The urge of conventional western medicine to prove the effectiveness in randomised clinical trials makes it difficult for application on medical devices: how does one test a fully functional device against a non-functional device? That is the reason why there are no such studies. We could, however, test a standard therapy (or management) of a chronic illness against a complementary SCENAR treatment of even against a SCENAR stand-alone

articles. Issue 8, Taganrog, 2002, pp. 7-12

¹⁵ Grinberg J.: Physical Influencing Factors in SCENAR-therapy. Application Sound Therapy. "Southern Federal University Bulletin. Technical Science" Journal, Vol 99, Issue 10, 2009, pp. 123-128

¹⁶ Melzack R, Wall PD. Pain mechanisms: a new theory. Science 1965;150:971-5

¹⁷ Grinberg Y.: Effectiveness of SCENAR-therapy. Physiological Aspects; Scenar-therapy and Scenar-expertise: Collection of articles. Issue 4, Taganrog, 1998, pp. 9-21

¹⁸ Engelbert CW: SCENAR und Homoeosiniatrie. Biologische Medizin. 35, 2006

¹⁹ Tarakanov A., Luspikayan S.: Activation of Antimicrobial Endogenous Protection in Patients with Pyogenic Surgical Pathology. Current problems in surgery, Abstracts from the II Conference of the Department of surgical diseases No.4, State Medical University of Rostov, 2005, Russia, pp. 66-67

treatment. This is in my opinion the task of independent universities to do. Of course that is where the political hoo-ha starts – and that is not what this article is about.

For me personally, who uses SCENAR every day in my holistic clinic, it would be desirable to see the complementary use of this device within the medical system to treat chronic ill patients. I do not want to discuss the value of randomised clinical trials – however, they are the accepted standard at present. If the wide acceptance of SCENAR therapy in the Russian medical system is not good enough to use the device in the western world we need medical doctors to engage with SCENAR practitioners in order to get those trials. And those patients who suffer from long standing chronic painful illness should discuss with their doctors the complementary use of SCENAR.

About the author

Dr. Prinz has run the Energy Health Clinic in Whakatane since 2004. In addition to being a qualified medical doctor in Germany, he has trained as a NLP Master Practitioner and Ericksonian Hypnotherapist, Rapid Depression and Rapid Anxiety Treatment (Shinnick), Certified NES Practitioner, and Certified SCENAR Practitioner and RITM SCENAR Institute Trainer.