



SCENAR or Self-Controlled-Energo-Neuro-Adaptive Regulator

Can SCENAR help me?

If you are in Pain - then SCENAR Therapy can help you.

The effectiveness of SCENAR Therapy for Pain relief is substantial and lasts longer than other pain control methods. A Macquarie University (Sydney, Australia) randomized control trial using an ENAR[®],^ç (SCENAR Personal device) versus conventional TENS (Transcutaneous Electrical Nerve Stimulator) has been conducted in Sydney and this showed 'dramatic and sustained results' with chronic pain reduction, functional improvements and general health restoration.

SCENAR therapy does not treat disease - it restores health. SCENAR therapy involves finding imbalances (asymmetries) in the body and treating them accordingly.

SCENAR Therapy does not act upon one specific part of the body or organ, but on the WHOLE body.

The sole purpose of SCENAR Therapy is to stimulate the body's own natural healing process.

How does it work?

Our health relies on the continuous exchange of information within the body. Each and every function of the body is interrelated and works in harmony with other functions - that is until stress, injury or disease disrupts that communication. The SCENAR communicates with all functions of the body through direct contact on the skin, tuning into the body's inner communication, and understanding the body's needs from the signals being sent back and forth. The SCENAR responds to these signals accordingly with gentle electrical impulses that communicate with the nervous system to stimulate the body's own healing process, so your body can operate with maximum efficiency once again.

This process used by the SCENAR is called 'Reflex Biofeedback', which is an ongoing, reflex conversation that proceeds at real-time, in biological speed and requires no conscious mental activity.

The SCENAR device sends out a series of electrical signals through the skin and measures the response. Each signal is only sent out when a change, in response to the previous signal, is recorded in the electrical properties of the skin. Visible responses include reddening of the skin, numbness, stickiness (the device will have the feeling of being magnetically dragged), a change in the numerical readout and an increase in the electronic clattering of the device. The C-fibers, which compromise 85% of all nerves in the body, react most readily to the electro-stimulation and are responsible for the production of neuro peptides and other regulatory peptides.

The body can get accustomed to a stable pathological state, which may have been caused by injury, or disease. The SCENAR acts as a catalyst to produce regulatory peptides by stimulation of C-fibers for the body to use where necessary. It is these neuro peptides that in turn reestablish the body's natural physiological state and are responsible for the healing process. As these peptides last up to several hours, the healing process will continue long after the treatment is over. The large quantity of neuro peptides and C-fibers in the Central Nervous System can also result in the treatment on one area aiding with other chemical imbalances, correcting sleeplessness, appetite and even behavioral problems.

SCENAR therapy is applied via the skin. SCENAR operates on the principle of biofeedback. The SCENAR device generates electrical impulses, which are similar in their form to the body's own neurological impulses. Since these impulses operate within the physiological parameters of the body, the body does not regard them as invasive, so negative side effects as a result of SCENAR therapy are virtually non-existent.

The SCENAR uses active biofeedback - meaning that the SCENAR has a changing base of processing. As an active biofeedback device the SCENAR involves itself in its interaction with the body, assisting or boosting the flow of information. It is as though the SCENAR device begins by 'asking you a question' and immediately 'listens' for your answer. As soon as your 'answer' – measured by way of skin dynamics (changes) – is 'heard' by the device, it immediately makes another 'comment' and awaits your next response – the process is active in the same way a good conversation is active – your replies are constantly changing and so is the SCENAR's prompting.

This active interaction is set up to prompt the body to identify areas called '**Asymmetries**'.

These asymmetries can include stickiness (the SCENAR will have the feeling of being magnetically dragged on the skin), reddening of the skin, skin numbness or hypersensitivity, and/or an increase/decrease in the electronic 'clattering' sound of the device as it is dragged across the skin.

Asymmetries are areas where the body's cells and tissues responses are more active, and thus they represent more optimal areas for SCENAR therapy. Asymmetries are found and identified because their information signal is a 'holographic' entry point to a 'whole body response reaction' to activate the body's self-healing processes.

SCENAR is different from all other forms of electro therapy (TENS, Electro-acupuncture, Interferential, etc) because it employs BIOFEEDBACK.

History

30 years ago a group of Russian scientists, doctors, engineers and physicians from Special Construction Bureau "RITM" commenced development work on the concept of **SCENAR or Self-Controlled-Energo-Neuro-Adaptive Regulator** invented by A. Karasev and A. Revenko. Their goal was to develop a method of treatment that was energy efficient, multi-applicable, portable and universal non-invasive regulator of body functions, perhaps even suitable to accompany cosmonauts into space.

SCENAR technology as a therapy was born in 1978. The method of treatment was invented by **A. Revenko**. The SCENAR device is capable of recognizing, preventing many health problems and restoring health. Russian pioneers were the first to successfully achieve repeatable therapeutic treatment using electrical signals to stimulate the human Immune System in aim to stimulate the body to heal, using modulations of its own endogenous energy.

In 1986, the first **SCENAR device**, having passed technical and clinical trials, was permitted by USSR Medical Council for application in the clinic-policlinic institutions and at homes.

The **SCENAR** (Biofeedback-controlled electro-stimulator) is regulated by the United States Food and Drug Administration, under 21 CFR 882.5050. Generic Name: device, Biofeedback, Product Code HCC, Class II exempt from 510 (K) pre-market notifications according to FDA Notice FR21ja98-84 as a battery-powered, professional use device for relaxation training and muscle re-education.

"**SCENAR**" is a trademark (according to class - therapeutic device and apparatus, electro-stimulators), registered in the state list of trademarks in USSR from **23 October 1989** by RITM.

Further research has been conducted at laboratories in the cities of Taganrog, Ekaterinburg and Chelyabinsk. In the last 12 years, more than 20 modifications have been developed ranging from the simplest hand-held devices to the most complex computer applications. **SCENAR** has brought to its creators the highest state awards.

SCENAR became available to the broad medical community after the Soviet Union collapse and since then the device has been gaining vast popularity and application among medical and health care practitioner throughout the world including UK, United States, Canada, Europe, and Australia.

In **2006** RITM has successfully certified its products and activities under the International Quality Standards ISO 9001 and ISO 13485. **RITM SCENAR devices** also comply with the European Directive 93/42/EEC for Manufacturing Medical Devices (CE Mark), **obtained in 2006**.

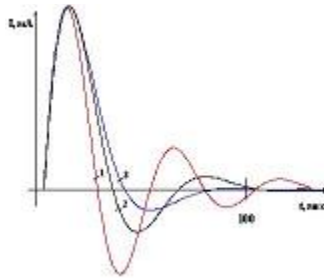
The innovations in device development and treatment methodology keep RITM far ahead of the competition a true world leader in development of biological feedback electric impulse therapy devices

The latest generation of **SCENAR devices** was patented by RITM with joint authorship: Y.Gorfinkel, J. Grinberg, M. Zenkin, A. Murancev, A. Nadochii, A. Revenko, M. Unakafov, S. Uvarov.

How does it work & why is Scenar more effective?

Several characteristics of **SCENAR** explain why this new non-invasive energy-informational medical technology, aimed at activation of human organism reserves and promotion of its adaptation capacities, has been looked at as the ideal electrotherapy by an increasing number of specialists all over the world.

1. Bipolar electro-impulses With the development of electrotherapy and electro puncture as a modern form of the classical acupuncture of the East, it has become clear that for successful correction of the pathological changes in the human organism are necessary such electro actions, which are adequate to the natural bioelectric activity, i.e. an electrical current similar in its parameters to the endogen bioelectric regulatory signals. **SCENAR** generates exactly such non-damaging in form and duration high-amplitude bipolar electro-impulses, which resemble the physiological bio-currents. Due to the unique physical characteristics of the **SCENAR signal**, the probability for excitation of the thin peptidergic C-fibres is manifold higher in comparison with the other methods of electrotherapy. In this way, without disturbance of the cell functions, a maximal part of the nervous tissue is activated, which is necessary for the achievement of optimal adaptation response from the patient's organism.



2. Bio-feedback

To achieve maximal therapeutic effectiveness it is necessary that the electro action should change its parameters automatically in accordance with the reaction it has induced in the organism. Such a dynamic coordination of the parameters of the influence and the condition of the organism could be achieved only if there is a constant informational biological biofeedback.

SCENAR is the first electrotherapeutic device in the world working on the principle of a real interpreting biological feedback between the device and the body. Reading the permanent change of the skin impedance (resulting from the electro action), SCENAR constantly modulates the form and the power of its signals. In the course of the therapeutic process each signal of the device controls the body activity and at the same time is controlled by the constantly changing condition of the organism. As a result each signal is different from the previous one, which prevents the development of accommodation to the action before the organism has generated enough amounts of neuropeptides, necessary for overcoming the pathological process and restoration of homeostasis.

3. Individually dosed influence

The long practical experience has shown that optimal therapeutic effect can be achieved when there is a maximal variability of the acting signal during the therapeutic procedure. A change in the signal form (in connection with the changes of the skin impedance) can be observed only to a certain limit.

In **SCENAR technology** (again for the first time in the world), the method of individually dosed influence is realized using as a main criteria the lack of further dynamics of the complex impedance of the skin (i.e. the stabilization of the electro-physiological parameters of the skin and as a result of this and due to the presence of biological feedback stabilization of the parameters of the acting signal).

The individually measured regime practically excludes the possibility of over-dosing and the development of

adverse side effects. The **SCENAR technology** is based on the concept, that the minimal dose, necessary for achieving the desired effect, is the optimal. The emphasis is put on the informational rather than the energetic component of the electrotherapeutic action.

Apart from the unique characteristics of the acting signal and the presence of biological feedback, the considerably higher effectiveness of **SCENAR** in comparison with the common methods of electrotherapy is due to the possibility of **SCENAR** - expertise to be carried out during the therapeutic process itself, which permits the evaluation of the effectiveness of the procedure and its optimization effect.

In the base of electrotherapeutic action and in particular – of the electrotherapeutic action of SCENAR, lies the neuro-adaptive mechanism of adaptation, which ensures dynamic equilibrium of the human organism, both with the surrounding environment and with its internal environment – the homeostasis, i.e. the state of being healthy.

The regulation of all vital functions is realized because of the close connection and interaction of the nervous and the endocrine systems, the effects of which are mediated through a release from the neural cells of biologically active substances called neuromediators (NM) – classical neuromediators – amines (acetylcholine, noradrenalin, etc.) and amino-acids (glutamine, asparagine, etc.), which are characteristic of the thick myelinated A- and B-neural fibers and have a clearly defined (quick and short) physiological effect; neuropeptides (NPs) – the largest and at present most important group of NMs from a physiological and medical point of view – endorphins, enkephalins, neurotensin, bradikinin and a great number of others (more than 2000 in all). The NPs are the main NM for the thin non-myelinated C-fibers, which are particularly difficult to excite (activate). These peptidergic (producing NPs) fibres make up the major part (more than 70%) of the nervous tracts. Contemporary science has already unambiguously proved that due to their specific properties (long lasting and extended in time and distant in place effect, formation of complex regulative chains and cascades for the control of multiple physiological functions, powerful analgesic effect etc.) the NPs – these endogen own for the human body pharmaceuticals carry out all auto regulatory and auto therapeutic processes focused on the maintenance and restoration of homeostasis, i.e. the state/ condition of health in the organism.

That is why, the main goal of electrotherapy is that a maximal part of the nervous tissue is activated, by activating the peptidergic (producing NPs) C-fibres, which should result in the release of an effective dose of NPs, which are necessary for overcoming the disturbances existing in the organism. This goal can be achieved only to a certain extent by the conventional methods of electrotherapy:

- due to the non-physiological character of their impulses, in form and duration, an excitation of the thick A-fibres is mainly achieved, whilst it is practically impossible to activate the extremely thin C-fibres without the risk of damaging the remaining tissue.
- the process of habituation of the organism to similar impulses brings about, comparatively quickly, a decrease of their therapeutic effect.

SCENAR is an abbreviation for the name of the device - Self-Controlling Energy Neuro-Adapting Regulator. Scenar is a neuro-adapting energy that turns on the brain to do what it should do - heal the body. The brain is the supreme coordinator of all healing. It controls the meridians; it controls the immune system, and the hormonal systems. Failing to heal is a brain that is stuck in a phase lock loop. Quite simply, the signals from the damaged tissue are not being recognized. Scenar reactivates the brain. When used as an Electro acupuncture therapy, you can deliver signals more precisely to target tissues.

Speaking of its properties in general, it is ideal for the physician, nurse, and physiotherapist. Spot treatment is rapid and complements all clinic functions. Each point treated is generally less than 30 seconds. The device automatically computes the disordered energy, sends back healing impulses, and beeps when the treatment

cycle has been completed. Through using the Voll's electro acupuncture points, the acu-points can be measured, treated, and remeasured to insure therapeutic impact.

The principle of operation of the SCENAR is its ability to detect minute electric impulses of the meridian system as well as peripheral nervous system over lesion sites and send back to the brain dissonant impulses that stimulate a healing reaction. The premise of therapy is that whenever tissue is lesion, the brain's ability to initiate a healing response is being impeded. The Scenar impulses detected upon the skin of peculiar electric pulses modifying the topical condition provides a feedback loop and, as a result, causes reactions in the brain aimed at restoring the lost functions. While regulating unbalanced body systems, SCENAR brings to normal pathological conditions that are restorable. In this fashion, it is similar to homeopathy, but it acts faster from our clinical observations. In fact, it is a great complement to an experienced homeopathic practitioner.

One can examine all the great healing systems - herbal medicine, homeopathy, acupuncture, massage, psychotherapy, chiropractic, etc., but the fact of the matter is, if the brain is blocked, almost any healing force will not be successful. The brain regulates the nerve force, the meridian system (wireless anatomy), as well as the neuro-immunological functions through neuro-hormones and neuropeptides. Chronic disease can be viewed as blocked or 'stuck' energy. Quite simply, the brain is not recognizing the trauma, the immune function follows, and pathology continues to grow on its own. This quite summarily sums up the degenerative process of cancer, allergy, autoimmune disease (diabetes, lupus, MS), and many others.

SCENAR impulse therapy produces an electric tidal wave of neurological energy that activates pathology into a neuro-vegetative as well as immune response. There is no negative impact and the effect of action remains for quite a long time after the treatment has been applied. One single treatment can start a cascade of healing that goes on for weeks, even months. The recovery is provided due to restoration and harmonization of the inherent body reserves but not by suppressing defiance and adapting mechanisms of the body that mostly results in more severe forms of diseases or lingering course of the basic disorder. Allopathic drugs generally provide no restoration and harmonization; rather it suppresses the body, perpetuates the disease, and causes a cascade of further degenerative functions that ultimately lead to chronic degenerative (iatrogenic) disease. Drug therapy has little place in the healing and restorative process, except by virtue of life saving measures and surgical interventions.

SCENAR brings no changes into normally functioning organism. The effect of SCENAR therapy has been described by the inventors as 90% positive results in 60% of cases, providing complete clinical recovery, and in 30% of cases, it at least produces positive dynamics to any disease process. With SCENAR-therapy the recovery is achieved, on average, three times quicker when used in conjunction with other modalities - physiotherapy, acupuncture, massage, chiropractic, dietary, herbal medicine, etc. Thus, if the treatment of lumbago would require one month of remedial therapy, with Scenar treatment in conjunction, would be expected to be reduced to 10 days. Internal conditions respond accordingly. For example, a peptic ulcer by herbal medications often requires three weeks, but adding SCENAR-therapy, one may eliminate the predominate symptoms in 5-7 days, without any additional drug treatment.

SCENAR is compatible with all kinds of treatments, it is quick, 3 to 5 minutes, and definitely, increases positive effect. SCENAR is recognized as an ideal electrotherapy and one of the best representatives of reflex therapy methods. SCENAR-therapy provides normalization of the malfunctions, quicker course and pronouncement of pathological processes, considerable improvement of general condition, analgesic, anti-inflammatory, antipyretic, normalization of metabolic processes, improvement of lymph drainage, external and internal rejuvenation, better sleep and emotional condition, and many other benefits.

One of the most valuable effects of SCENAR is that it eliminates stress reactions in the organism and causes health-improving reactions that provide self-recovery of the body. For patients SCENAR is a way to a new health. For users SCENAR is a way to a new healing and delivering life force.

We know that the human skin and the inner organs have a tight connection through the nerve system. This connection already exists from the early stage of embryogenesis onwards, because both the nerve system and the skin are created from the same leaf of the young embryo, the ectoderm. The nerve branches, in their turn, are connected to every inner organ.

It is known that because of these connections, the nerve system plays an important role in the regulation of the activities and states of the inner organs. Thanks to the reasons as mentioned above, it is possible to regulate the state of the inner organs through the skin. The SCENAR devices are used to affect the skin on those places that will lead to the specific regulation of inner organs, for example to treat diseases.

It is necessary to point out that the regulation of the inner organs through the skin is only one important effect of the treatment process. There are more aspects, and one of them is humeral regulation. During its appliance on the skin, SCENAR is affecting the C-fibres of the nervous system. As a result, the channels of the C-fibres are easily opened and a huge amount of neuropeptides, like endorphins, are excreted from these fibres. These neuropeptides are spread all over the body in a quick way. And we know that neuropeptides are the natural medicine for all pathological processes in the human body.

Yet another important effect of SCENAR therapy is the successful training of the adaptive reactions (Garkawi, Kwakina). Adaptive reactions are unique, non-specific reactions of the body or any kind of stimuli that could affect health. When the adaptive reactions are well trained, the body can heal itself and prevent the development of a wide variety of diseases.

When operating, SCENAR works through the principle of biofeedback. The system is measuring the activities of the various skin areas. Thanks to this, we can find the right places for treatment and define the specific treatment parameters. The original SCENAR devices and treatment protocols have been designed and are produced and taught in license of the inventors: J. Grinberg, J. Gorfinkel, A. Karasjev and A. Revenko.

SCENAR application is indicated at any stage in treatment of the following diseases:

- Nervous system (various diseases of the vertebral column with secondary disorders of the nervous activity, static and dynamic's disorders of the vertebral column, deformation of the spinal column, radiculitis, neuritis, strokes and their consequences, diseases of the vegetative nervous system etc.);
- Skeletal-muscular system (myositis, arthritis, arthrosis, bruising of the soft tissue, at the fractures at different stages of the process);
- Respiratory system (tracheitis, bronchitis, viral infection, pneumonia, pleurisy, bronchial asthma);
- Cardio-vascular system (angina, hypertonia, hypotonia, various form of arrhythmia), vessels of the extremities (endarteritis, varicose veins, disturbance of micro-circulation, trophic ulcers);
- Digestive system (gastritis, enteritis, colitis, cholecystitis, hepatitis);
- Genito-urinary system (pyelonephritis, cystitis, disturbance of the cycle, adnexitis, infertility, toxicosis in pregnancy);
- Tooth and mouth cavity diseases (periodontosis, periodontitis, arresting of inflammation and complication after the treatment of pulpitis and periodontitis, arresting pain syndrome);
- Other pathological conditions and their combinations.

The Effects of Scenar Action (SCENAR-Therapy)

- Considerable improvement of the general state with an increase in the adaptive ability of the organism;
- Returning disturbed functions back to normal;
- Speeding up and slowing down the manifestations of pathological processes;
- Pain-killing;
- Anti-inflammation;
- Anti-allergy;
- Anti-swelling;
- Normalization of the vascular and blood functions;
- Endocrine-immunity response of the organism;
- Normalization of the metabolic processes.

The effects are traced and confirmed by additional methods of the investigation (ECG, REG, EEG, x-ray, CT, U-Sound irido-diagnostics, bio-chemical investigations, electro-information investigation, computer acupuncture diagnostics - Nakatani, Voll, auricle-diagnostics).

FAQ

WHAT DOES IT FEEL LIKE?

As the device moves over the surface of the skin a comfortable tingling sensation is felt. In cases of severe pain or acute conditions the sensations may be stronger.

The therapist will place the Scenar on the body at the most painful area. If there is not a specific painful area a “general zone” may be used. Application of specific techniques in Scenar procedures can be compared only to a game of chess: it is necessary to know game rules and to be able to analyze specific situations. The size of figures or what tree the chess board is made from are not important for the chess player. What important is the ability to solve the plans of your opponent, to foresee a course of his ideas. To equate this to treatment is simply for the therapist to understand the rules of using Scenar and apply them accordingly based on the biofeedback from the patient, not to treat any disease. This treatment will then vary from patient to patient and patient visit to patient visit. Thus there will be no optimum uniform technique for a specific disease! This is a main advantage of SCENAR-therapy and its main difficulty: highly individualized treatment.

HOW DOES SCENAR WORK ON A DISEASE?

Patients having SCENAR treatment need to take responsibility for their health and are advised to actively participate in the treatment and recovery process. The chemical compounds released by the nerves affect not only the problem areas, but also circulate in the blood, treating other areas of the body. This goes some way to explain how old and often forgotten problems are brought to the surface for treatment.

HOW OFTEN WILL I NEED TREATMENT?

In order to create a continuous flow of circulating regulative peptides, SCENAR action must be given quite often. For any fresh injury or any acute inflammatory process, treatment needs to be intensive; ideally once or even twice daily. For chronic conditions treatments are ideally given several times a week initially, reducing as things improve.

WHAT ABOUT MY CONVENTIONAL TREATMENT?

If you are receiving treatment from your doctor it makes sense to inform him or her about SCENAR therapy. Treatment may enable you to reduce or even stop taking some medication - under the supervision of your prescribing doctor of course.

WHAT ELSE DO I NEED TO KNOW?

In treating chronic conditions, occasionally a healing crisis may occur (experienced as a complete lack of energy and malaise) due to the body getting rid of toxic energy too rapidly. There are techniques that can be used with SCENAR to manage this. Exceptional results are achieved when treating sportsmen and women with immediate injuries and especially if treatment is done as soon as possible after the injury. Do not shower or bath for two hours before and after SCENAR Therapy, as the optimal effectiveness of the treatment will be disturbed by the washing of the skin.

IS IT SAFE?

As the SCENAR impulse is similar to endogenous nerve impulses, it is non-damaging and safe. Only people with cardiac pacemakers cannot be treated.

HOW MUCH DOES IT DIFFER FROM OTHER THERAPIES?

Only the SCENAR combines energy measuring functions along with real-time feedback and constant adjustment, to deliver the correct type and amount of energy to the body. This means each impulse is different from the previous one, so the body is unable to adapt to the signal. The SCENAR impulse is high amplitude, so it stimulates C-fibres which make up about 85% of the nerves in the body. This explains the rapid effectiveness of SCENAR treatment on the whole body.

OLM-01 Healing Compound Blanket is a therapeutic device made as a blanket that has shielding layers.

Each layer is made of synthetic metalized film, thickness is 1 micron. The shielding layer on the patient's side is intended for reflection of electromagnetic radiation in infrared and extremely high-frequency ranges.

The OLM-01 Energy Blanket is designed for helping treatment and prophylaxis of functional disorders and diseases.

The adaptive mechanisms work to normalize the patient's body. This underlies the principle of the device operation.

The device reaches its power thanks to electrostatic field equal to one atmosphere.

OLM-01 Energy Blanket may be used in hospitals and other medical institutions as well as at home.

High effectiveness, usability and safety allow applying **OLM-01 Energy Blanket** at home not only for treatment purposes but also for relieving fatigability, normalizing sleep, and raising body's resistibility.

The blankets influencing therapeutic factors are:

- * Protection of the covered body from external electromagnetic and electrostatic action;
- * Reduced heat emission and normal heat exchange due to reflected heat radiation in the infrared spectrum of electromagnetic waves;
- * Influencing the patient with his/her intrinsic electromagnetic radiation of extremely high frequency (the working frequency of body cells);
- * Redistribution of surface electric charge on the patient

All the above factors together improve protecting and recovery capabilities of the body, reduce pain sensitivity, normalize energy exchange, and boost the immunity and metabolism

