

K·LASER **DYNAMIC THERAPY**



CUBE™

DYNAMIC THERAPY

K- LASER AROUND THE WORLD

THE LEADING ENGINEERING AND MANUFACTURING COMPANY OF THE MOST COMPACT DEVICES WITH CUTTING EDGE LASER THERAPEUTIC TECHNOLOGY "K-LASER CUBE," FOR A TOP PERFORMANCE IN **DYNAMIC CLASS IV LASER THERAPY**.



K-LASER THERAPY IS SYNONYMOUS OF DYNAMIC THERAPY

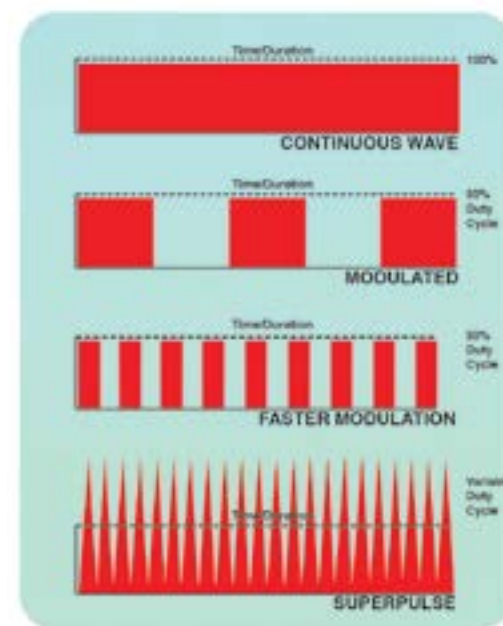
The intuitive **K-Laser** software works with treatments made up of several phases, offering the possibility to modify the various parameters of operation, as well as time, frequency and power during each single therapy.



DIFFERENT TYPES OF TISSUES RESPOND TO DIFFERENT MODULATION PARAMETERS

The parameters set in the new **K-Laser Cube** series can be easily recognized by the type of pulse emitted (**CW** modality, pulsed modality at 50% with modulated frequencies, **ISP** Intense Superpulsed modality), each with a different tissue response. The effects of laser therapy have been studied in depth, and have determined:

- the amount of energy delivered in relation to the end result;
- the effects of laser therapy at different tissues depths;
- the effects of laser therapy considering penetration depth, appropriate modality of application and tissue type to be treated.



CUBE THERAPY REDEFINED FOR EACH TYPE OF PATIENT

K-Laser Cube helps determine the perfect dosage of energy, considering every possible variant, thanks to its graphically intuitive menu.

The greater power plays an important role in delivering an effective laser therapy.

TYPE OF PAIN: CHRONIC AND ACUTE

With **K-Laser Cube**, precise and personalized treatments can be set based on each patient's perceived level of pain.

THE IMPORTANCE OF MELANIN IN THE BODY

In addition to the body type and the tissue type, **K-Laser Cube** considers another determining factor: the melanin content of the skin.

Thanks to an innovative software, **K-Laser Cube** recognizes six different skin types, in relation to each variant of the preset protocols.

DYNAMIC PROGRAMS

Each **K-Laser Cube** protocol uses a dynamic setting of parameters to treat every type of tissue in an optimal way.



K-LASER

CUSTOM DYNAMIC THERAPY

K-LASER

FIELDS OF APPLICATION

The most recent literature has shown that **K-Laser Therapy** has **significant, positive, biological effects**, given the great amount of energy delivered in depth, improving the regeneration process of the cells and accelerating tissue repair.

Acute and Chronic Pain Management

Sports Medicine

Traumatology

Physiotherapy and Rehabilitation

Post Surgical Therapy

Podiatry and Dermatology

Stomatology and Oral Pathology

Therapy of soft tissue lesions:

- › Wounds
- › Bed sores
- › Ulcers
- › Diabetic ulcers
- › Mucositis

K-LASER

BIOLOGICAL EFFECTS

Anti-inflammatory and analgesic

Speeds up metabolic processes

Enhanced vascular activity

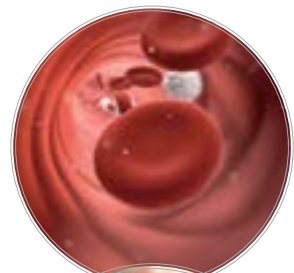
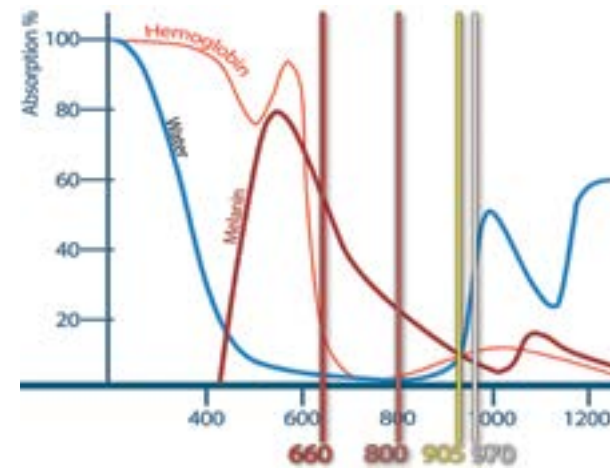
Immune- regulation

Improvement of nerve function

Faster repair of damaged tissues (wounds, bed sores, ulcers, diabetic ulcers, and mucositis).



K-LASER CUBE IS THE WORLD'S MOST INNOVATIVE LASER THERAPY: IT INCLUDES THE OPTIMAL RANGE OF WAVELENGTHS, DELIVERING UP TO 15 DIFFERENT COMBINATIONS.



◀ 970 nm

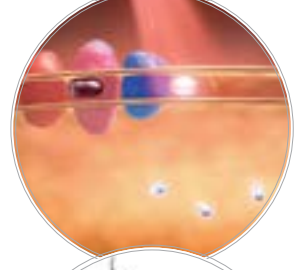
Cells are supplied with the substances necessary for its metabolism, such as oxygen and other nutrients primarily by the blood stream which also carries away the catabolic by-products.

This wavelength is principally absorbed by the water in our organism and all of the energy transmitted by the laser therapy is converted into heat. The deep strata of tissue become true localized hot spots, which create temperature gradients at the cellular level that stimulate local micro-circulation due to the greater supply of oxygen.



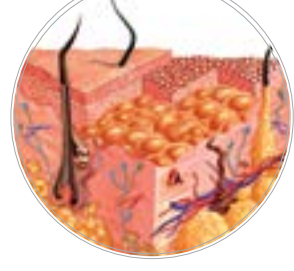
◀ 905 nm

Oxygen is released at varying rates from the blood stream, and the quicker this happens, the greater the supply of nutrients and oxygen the cell will require to carry out all of its natural healing processes. This wavelength is absorbed in part by hemoglobin, water, melanin and the cytochrome C oxidase. The more this wavelength is absorbed, the greater the quantity of oxygen available to the cells.



◀ 800 nm

The terminal enzyme in the respiratory chain is the cytochrome C oxidase, which determines how efficiently the cell converts molecular oxygen into ATP. The absorption by the enzyme has proven to be at its highest with 800 nm being able to produce a molecule of ATP for each oxidation-reduction cycle. The absorption of the photon speeds up this process, accelerating ATP production.



◀ 660 nm

This wavelength is absorbed principally by the melanin in our skin which ensures that a large dose of energy be delivered on the tissue's surface. Since this laser emission can both inhibit bacterial proliferation and promote cell growth, it is most efficient in wound healing.

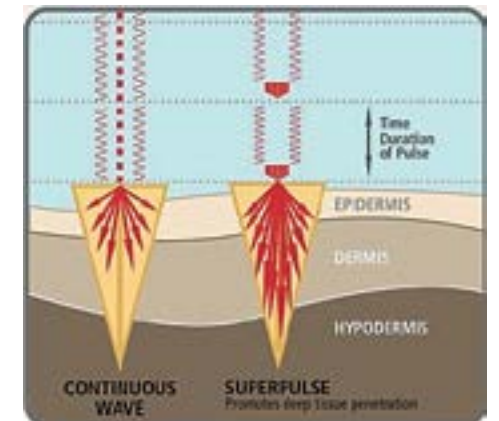
THE NEED OF A MORE POWERFUL LASER

The most recent scientific research has proven how important it is that **the average power delivered be kept constant**, as it is essential to deliver the right amount of energy for a correct laser treatment. For example: some lasers operate in super pulsed modality emitting pulses with very high peak power for short instances (millionths or billionths of a second), but delivering only a few watts of power overall.

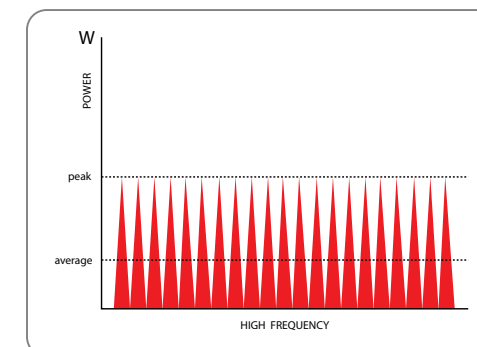
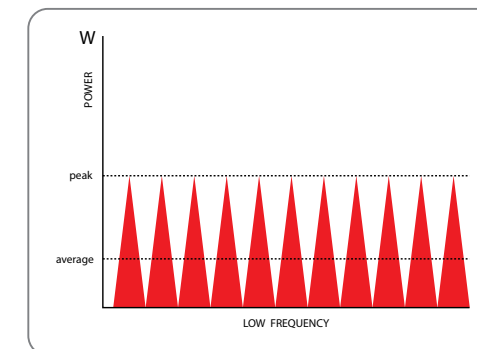
ISP INTENSE SUPER PULSE

(da 1 a 20.000 Hz)

K-Laser Cube is the only laser which, due to its unique and exceptional **ISP MODALITY**, allows you to select the right frequency modulation and the average power, even at a **super pulsed mode**.



The pulse width is variable and controlled by K-Laser's powerful software and it is up to 200 times wider than that emitted in ultra-fast modality.



One can select the frequency of the pulses, from the lowest (**LOW FREQUENCY**), for an analgesic treatment, to the highest (**HIGH FREQUENCY**), for biostimulation, maintaining the setting for the average power independent and adjustable so that the energy delivered be the one suitable for that type of tissue.

› SPORTS REHABILITATION › PHYSIOTHERAPY



EFFICACY IN SPORTS REHABILITATION



The innovative K-Laser Dynamic Therapy has had remarkable results in the fields of **Sports Medicine and Traumatology**.

The faster treatment cycles and the ease of application, make **K-Laser's Dynamic Therapy** perfectly suitable to treat all the pathological conditions of athletes, bio-stimulating the damaged tissues and providing immediate pain relief.

Treated Pathologies:

Post Fracture
Post Trauma
Ligament injuries
Tendon Luxation
Inflammatory Pathologies of the Tendons



Fields of application in Sports:

TENNIS
GOLF
SOCCER
MOTORCYCLING
VOLLEYBALL
BASKET
SKI
ATHLETICS
DANCE
FOOTBALL
SCUBA DIVING
MARTIAL ARTS
CANOE KAYAK
RUGBY....and other.



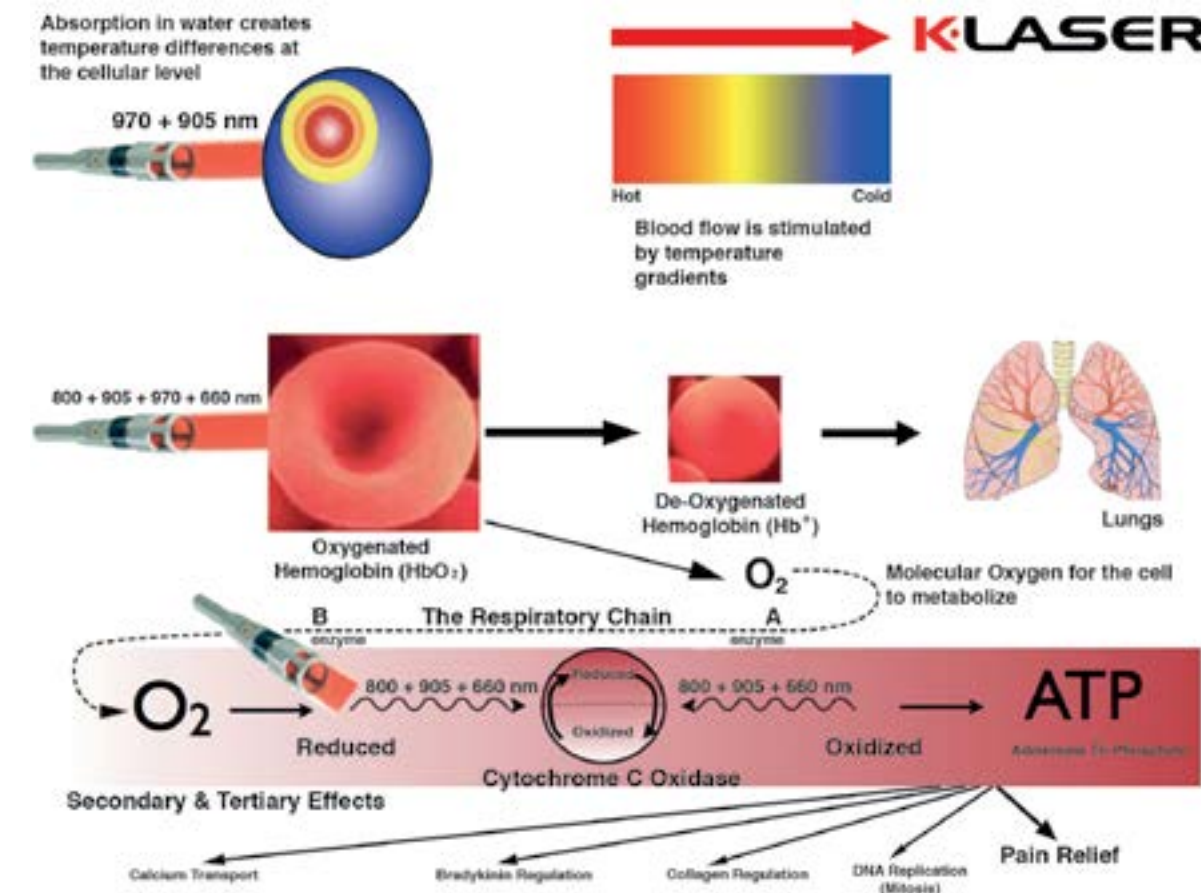
EFFICACY IN PHYSIOTHERAPY

THE K-LASER DYNAMIC THERAPY USES NUMEROUS PULSED FREQUENCIES TO PRODUCE A COMBINATION OF: **ANALGESIC, ANTI-INFLAMMATORY, BIO-STIMULATING AND ANTIMICROBIAL EFFECTS.**

Thanks to this sophisticated technology, **K-Laser Cube** represents an almost irreplaceable instrument in the daily practice of the Physiotherapist, who can tackle almost any problem in his every day practice.



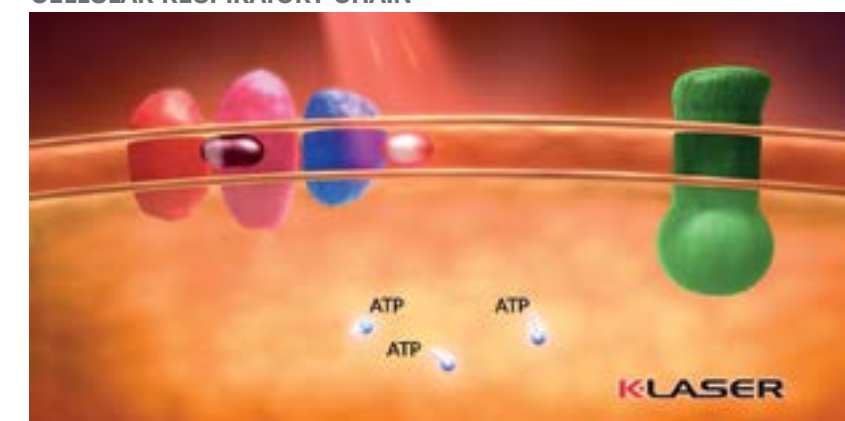
ACCELERATED TISSUE BIOSTIMULATION



K-Laser Therapy penetrates deeply into the tissues and accelerates cellular regeneration, by increasing the energy available to the cells.

The cells assimilate nutrients and get rid of waste products faster. As a result of exposure to laser light, **the cells of tendons, ligaments and muscles are repaired faster.**

CELLULAR RESPIRATORY CHAIN



BIOLOGICAL EFFECTS

K-LASER'S VALUABLE PROTOCOLS FOR DYNAMIC THERAPY IN PHYSIOTHERAPY AND REHABILITATION ARE BASED ON THE RESULTS OF CLINICAL STUDIES.



anti-inflammatory

K-Laser has an anti-edema effect, as it not only causes vasodilation but also stimulates the lymphatic drainage system (draining swollen areas). As a result, there is a reduction of the swelling caused by trauma and / or inflammation.

Bibliography:

Alves AC et al. Effect of low-level laser therapy on the expression of inflammatory mediators and on neutrophils and macrophages in acute joint inflammation. *Arthritis Res Ther.* 2013;15(5):R116.
Barretto SR et al. Evaluation of anti-nociceptive and anti-inflammatory activity of low-level laser therapy on temporomandibular joint inflammation in rodents. *J Photochem Photobiol B.* 2013 Dec 5;129:135-42.

analgesic

K-Laser therapy has a highly beneficial effect on pain receptors, by increasing the threshold and reducing the transmission of painful stimulus to the brain. Moreover the anti-inflammatory and the anti-edema effect reduce the pain. **K-Laser** therapy induces the production of endorphins.

Bibliography:

Chow RT et al. Efficacy of low-level laser therapy in the management of neck pain: a systematic review and meta-analysis of randomised placebo or active-treatment controlled trials. *Lancet.* 2010 Mar13;375(9718):894.
Gross AR et al. Low Level Laser Therapy (LLLT) for Neck Pain: A Systematic Review and Meta-Regression. *Open Orthop J.* 2013 Sep 20;7:396-419.
Maia ML et al. Effect of low-level laser therapy on pain levels in patients with temporomandibular disorders: a systematic review. *J Appl Oral Sci.* 2012 Nov-Dec;20(6):594-602. Review.

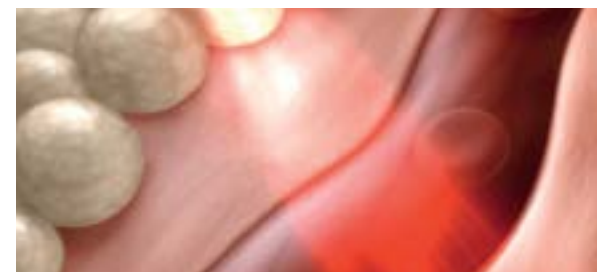
improved vascular activity



Bibliography:

Ottaviani G et al. Effect of Class IV laser therapy on chemotherapy-induced oral mucositis: a clinical and experimental study. *Am J Pathol* 2013; 183: 1747-1757.
Schindl A et al. Systemic effects of low-intensity laser irradiation on skin microcirculation in patients with diabetic microangiopathy. *Microvasc Res* 2002, 64:240e246.
Feng J et al. Low-power laser irradiation (LPLI) promotes VEGF expression and vascular endothelial cell proliferation through the activation of ERK/Sp1 pathway. *Cell Signal* 2012, 24: 1116e1125.

K-Laser therapy significantly increases the formation of new capillaries, speeding up the healing process of damaged tissues, **causing the damaged tissue to repair and the wound to reduce in size.** Additional benefits include increased angiogenesis, which causes a temporary vasodilation, with an increase in the diameter of blood vessels. Increased blood flow will allow faster healing and reduce the pain.

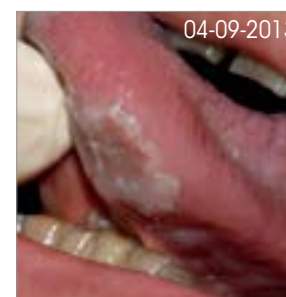


increased metabolic activity

K-Laser therapy enhances the production of specific enzymes, that work as oxygen carriers and therefore facilitate the repair and regeneration of damaged cells.

K-Laser's protocol **"Reduction of pain"** is used for the treatment of nervous injuries (traumatic or iatrogenic paresthesia, dysesthesia and anesthesia), twice a day, for 2 weeks, every other day.

improvement of the nerve function



improvement of soft tissue wounds

For the treatment of soft tissue injuries (mucositis, erythema and ulcers), the K-Laser treatment is used for 4 consecutive days.

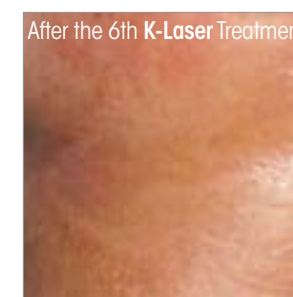
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Chermetz M.; Gobbo M.; Ronfani L.; Ottaviani G.; Zanazzo G.A.; Verzeegnassi F.; Treister N.S.; Di Lenarda R.; Biasotto M.; Zaccagna S. Class IV laser therapy as treatment for chemotherapy-induced oral mucositis in onco-haematological paediatric patients: a prospective study. *Int J Paediatr Dent.* 2013 Dec 25. doi: 10.1111/ipd.12090.

Before K-Laser Treatment



After the 1st K-Laser Treatment



PATIENT DURING RADIATION THERAPY FOR BREAST CANCER, AFFECTED BY RADIODERMATITIS.

treatment of skin wounds

The K-Laser treatment **"Soft Tissue Injuries"** is used for the treatment of skin wounds such as bed sores and ulcers, 2 times a day, for 2 weeks every other day.

K-LASER IN FOOT PATHOLOGIES



K-LASER THERAPY EFFICACY

K-Laser uses the super-pulsed technology, **"Intense Super Pulse" (ISP)**, with immediate results in tissue repair, delivering energy progressively in depth, diminishing the warming effect of the skin, giving immediate pain relief.

On the right, a list of foot pathologies treated with **the therapeutic zoom handpiece, ENT handpiece and with the high-energy optics.**

Already after the first session, the patient can perceive a marked improvement and immediate pain relief, due to **K-Laser's** non-invasive therapies.

Metatarsalgia
Hallux valgus-bursitis
Plantar Fasciitis
Tarsal tunnel syndrome
Arthritis-Osteoarthritis
Interdigital neuritis
Heel spur
Achilles tendonitis
Morton's neuroma
Post-sprain Edema
Diabetic neuropathy
Tibia-tarsal Distortion
Diabetic ulcer
Warts
Mycosis



EXPERIMENTATION AND RESEARCH IN FOOT PATHOLOGIES

K-LASER'S ADVANCED TECHNOLOGY IN LASER THERAPY AT DISPOSAL OF THE INSTITUTE OF HIGHER LEARNING "**LA CLAUDIANA**" OF BOLZANO – Italy HAVE LED TO A CONTINUED COLLABORATION TO DEVELOP AND TEST SPECIFIC TREATMENT PROTOCOLS TO DEAL WITH FOOT PATHOLOGIES.

"LA CLAUDIANA": HIGH QUALIFICATION UNIVERSITY

"La Claudiana" works closely together with several Italian and International Universities. Several conventions have been signed between the **Departments of Medicine and Surgery of the University of Verona**, of the **University of Rome "Sapienza"**, of the **University of Ferrara** and of the **University of Innsbruck**, to ensure proper academic training. The collaboration with these universities and the Healthcare Clinics in South Tyrol ensure a bilingual training (Italian and German) of the highest level.



CASE REPORT: Heel Spur treated with K-LASER CUBE

Case report by Podiatrist
DR. LUCA RIZZI
in collaboration with
"**LA CLAUDIANA**" of Bolzano.

A.R., a 35 year old male, checked into the podiatric clinic of the **Higher Learning Health Institute Claudiana** in May 2014, complaining of an acute pain to the heel of the right foot when standing, and reporting an even more intense pain in the same area when putting his foot down first thing in the morning. The patient had been suffering from chronic pain for 4 months when he decides to go to the clinic because the symptoms had become so severe that they hindered the usual movements, causing compensation through an antalgic gait that had nevertheless developed into pain to the contralateral foot.

X-Ray and ultrasound examinations confirmed the diagnosis of heel spur. The patient had tried to treat symptoms with FANS (non-steroidal anti-inflammatory drugs), but they provided only temporary relief.

Dr. Luca Rizzi, assisted by the third-year students of the *Master degree program in Podiatry at the Higher Learning Health Institute La Claudiana*, knows the difficulties in treating the heel spur very well and decides therefore to treat with **K-LASER CUBE** laser therapy.

The first objective of the medical team is to reduce the inflammation and pain. The patient will also benefit from the bio-stimulating effects of the laser therapy which improves the circulation and the metabolic activity of the cells as well as the functioning of the nervous system and immune-regulation. It also helps prevent the formation of fibrotic tissue.

The laser therapy includes 3 sessions a week and the use of a custom orthotic insole to relieve the pain in the aching area (Schwarz ring).

The program is set for acute pain and skin color type II.

The treatment time per session is **4:35 minutes**, two session are required, with a pause of ten minutes between the first and the second application.

The total Joule delivered are **1200** and the average power is **6 W**.

The operator uses the **"ENT"** handpiece directing the beam of photons to the insertion area of the plantar aponeurosis.

Right after the first application the patient reports immediate relief that improves with the two subsequent sessions.

By the end of the therapy, the pain not only diminished but completely disappeared. The use of the **orthotic insole** is important to safeguard the achieved mental and physical well-being and to prevent the relapse and any mechanical stress on the treated area.



EXPERIMENTATION AND RESEARCH IN FOOT PATHOLOGIES



CLINICAL CASES TREATED WITH DYNAMIC K-LASER THERAPY



Ⓐ plantar warts

For the treatment of warts, **K-Laser's** objective is to propose a non-invasive therapy solution that consists in a single treatment cycle.

Ⓐ onychomycosis

FUNGAL INFECTION OF THE NAIL APPARATUS

The mycosis can be located on the surface of the nail, or it can be proximal subungual or distal subungual.

If the mycosis is not treated, it can gradually cause onycholysis and nail dystrophy, and may proliferate along the skin of the sole of the foot and between the toes degenerating into **TINEA PEDIS INTERDIGITALIS**, commonly called **ATHLETE'S FOOT**.

The podiatric treatment with **K-Laser** advanced therapy, foresees that the treatment be carried out in several phases with interchangeable handpieces: from a therapy with the ENT handpiece to a therapy with the high energy handpiece. The first step is to use a pulsed therapy to reduce the inflammation, then treat to eliminate the nail fungus, and finally, disinfect the treated area completely with the non-invasive high-energy therapy.



Ⓐ diabetic ulcers

The diabetic ulcer affects the skin and the subcutaneous tissues and it is an injury that rarely heals in a spontaneous way. The treatment of the diabetic ulcers of the foot are one of the greatest challenges for a therapist, as they are rarely treated in a non-invasive way, without pain and a careful angiological and histopathological evaluation. **K-Laser** therapy helps with its bio-stimulating effect and the consequent healing of the damaged tissues.

Ⓐ vascular ulcers of the malleolus

Venous insufficiency in the superficial layers lead to these venous ulcers around the inner side of the malleolus rather than in the outer side of it.

These are often accompanied by edema: the Pulsed **K-Laser** therapy results in a better vascularization and the healing of the damaged tissues.



REFERENCE CENTERS IN ITALY

FOOT DISEASE

PODIATRISTS INTRODUCTION



DR. RIZZI LUCA
MANTOVA

Dr. Luca Rizzi is a Podiatrist with a Master Degree in Wound Healing from the University of Rome – La Sapienza, specialized in the treatment of the **diabetic foot**.

He teaches at **La Claudiana - University of Bolzano** and a coordinator of pre-clinical and clinical experimentation in Onychomycosis and laser treatments of foot disease.

Dr. Rizzi has a private practice in Mantova, offering his patients the clinical experience achieved over the many years of work at the University. This experience has helped him produce state of the art clinical studies using the latest innovative technology.



DR. VAJANI CATERINA
MILANO

Dr. Caterina Vajani got her degree from the State University of Milan, in November 2005, and has obtained a Master Degree in Wound Care from the University of Rome- La Sapienza in 2010. She is the head of the **Italian Podiatrists Association** in the Lombardy Region.

She treats painful foot ailments in her modern and private practice located in Binasco (near Milan), using all the latest technologies for the benefit of his patients.

She treats all the pathologies related to the foot and can rely on the collaboration of other professionals where particular pathologies may require a more in depth diagnostic evaluation.



DR. GALLINA LORENZO
S. GIOVANNI LUPATOTO (VR)

Dr. Lorenzo Gallina works in S. Giovanni Lupatoto, **with a wealth of experience in podiatry acquired since 1977**, and 15 years of hospital work.

In his private and prestigious practice located in San Giovanni Lupatoto, he performs foot and postural examinations to prevent and rehabilitate from foot and related pathologies.

Dr. Gallina uses state of the art technology in Podiatry.

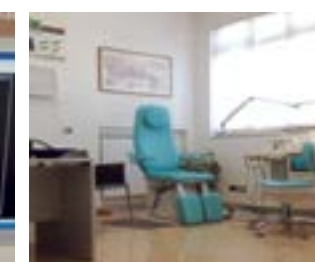
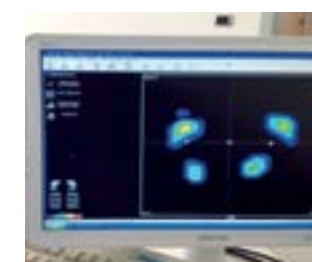


DR. NARDO SIMONE
NARDO RICCARDO
MESTRE (VE)

Both Dr. Simone Nardo and Dr. Riccardo Nardo have a degree in Podiatry from the University of Bologna, and Dr. Nardo Riccardo a Master in Posturology from the same university.

Their private practice **"Centro del Piede"** in Mestre (Venice), is a modern and prestigious structure with innovative technologies in the podiatric field. They treat hyperkeratosis, callus formation, onychocryptosis, onychomycosis, warts and ulcers. They carry out static biomechanical computerized examinations, dynamic and postural analysis with a baropodometric footboard.

Dr. Simone Nardo and Dr. Riccardo Nardo are specialised in orthotics making orthopedic insoles, and custom digital orthoses. They are able to diagnose any type of pathology and prescribe the optimal remedy.



THE MOST ADVANCED RESEARCH

K-LASER'S RESEARCH AND DEVELOPMENT DIVISION, HAS SET THE PACE ON NEW TECHNOLOGIES AND THE EVOLUTION OF LASER DEVICES WORLDWIDE.

K-Laser has been collaborating with the **Oral Medicine and Pathology University of Trieste** for more than 5 years, under Prof. Roberto Di Lenarda's direction and with the International Centre for Genetic Engineering and Biotechnology (**ICGEB**) in Trieste, putting at their disposal the most advanced technology and resources.



The information amassed from years of clinical activity conducted, allowed the **Oral Medicine and Pathology Department** (Dental School, "Maggiore" Hospital in Trieste - Italy), under Prof. Matteo Biasotto's supervision, to define numerous custom protocols.



- Among the treatments developed that have proven the **laser therapy's** efficacy are:
- **Oral Mucositis** in cancer patients under oncological therapy (in collaboration with the Departments of Hematology, Oncology, Radiotherapy and Ear Nose and Throat);
 - **Radiotherapy induced Dermatitis**, in particular in the treatment of breast cancer. (where it was possible to reduce considerably the patient's downtime between radiotherapies due to the collateral effects on the skin);
 - **Treatment of ulcers**, with great benefits in terms of faster healing and pain management;
 - **Nerve damage** caused by external trauma or iatrogenically induced;
 - **Post-surgery** bio-stimulation;
 - **Algic-dysfunctional Syndromes** of the temporo-mandibular joint.



These results have been achieved thanks to the intense preclinical activity carried out at the ICGEB in Trieste. **ICGEB** is an **international organization dedicated to molecular medicine, genetics and biotechnology**. Founded in the year 1987, it has been working as an autonomous Centre within the United Nations' System since 1994. The Center is supported by more than 60 Countries and conducts innovative research, in particular in the biomedical field.

Many experiments, which analyze the laser therapy's mechanisms and which aim at the optimization of the clinical protocols depending on the medical needs, are carried out in Trieste.

In this regard, **Dr. Giulia Ottaviani** has been working both at the Oral Medicine and Oral Pathology's Department and at the **ICGEB**. She is involved in the research related to: **wound healing, bio-stimulation, antimicrobial and sterilizing effects, effects on the immune system and on neoplastic lesions**.

The results from these experiments are the basis for the therapeutic treatment of patients, who have reported to date, important benefits from laser therapy.



Thanks to these brilliant results, a nationwide study was organized by the **Children's Hospital Burlo Garofolo** of Trieste as the project coordinator, with the participation of five different children's hospitals throughout Italy (Bologna, Cagliari, Padua, Turin and Pavia).

Dr. Giulio Andrea Zanazzo is responsible for the **L.A.M.P.O.** study (Laser and children's mucosites in Onco-Hematology) of the laser therapy in the healing of mucositis in a population of oncological pediatric patients; to date it turns out to be the first and only multicenter testing to evaluate the efficacy

of laser therapy in a pediatric population affected by oral mucositis due to oncological therapies.

To this day, the results are satisfactory as far as the improvement of the quality of life of these young patients is concerned, and also for the consequent efficacy of the cancer therapies they are subject to.

ADVANCED TRAINING

a - K-LASER TRAINING

K-Laser has a multi-media school where training courses are held periodically for doctors, physiotherapists and podiatrists interested in **K-Laser's** method of treatment.

The training is dedicated to owners of **K-Laser** medical devices as well as to those who wish to improve their knowledge of the principles of laser therapy, the concept of bio-stimulation of superficial and deep tissues, on the treatment of acute and chronic pain and criteria behind the use of the many **K-Laser handpieces**.

The advanced technology that characterizes **K-Laser** products, require a specific method of application also given to the numerous interchangeable handpieces used in **Physiotherapy, Podiatry and Medicine**.



b - K-LASER TRAINING SUPPORT

The training courses are also supported by the doctor and surgeon Carlo Gaspari's experience in **K-Laser** therapy and surgery.



DR. GASPARI CARLO
VICENZA

He has a degree in Medicine and Surgery from the University of Milan in 1987, and a post graduate degree in Clinical Pathology from the University of Ferrara in 1994.
Dr. Gaspari is a **K-Laser Therapy Expert** and he is a General Medicine Doctor (**GMD**) at the Health Center of Vicenza since 1991.

K-LASER THERAPY IN MEDICINE

In the daily clinical practice of an **MD**, the problems associated with both acute and chronic pain of the **joints and muscles** represent more than 50% of the cases treated every day.

In handling these cases, access to other medical structures or professionals in the field is often difficult given the long wait for these kind of treatments in Italy's public health service or distance of the specialized centers from the patients' home.

It is in this case scenario, that the **MD** can assist his patients with laser therapy sessions as an alternative therapeutic treatment.

The success of a treatment is directly proportional to the accuracy of the first diagnosis, and it depends on the patient's **"compliance"** to the proposed method of treatment since the patient often relies on the physician's advice rather than on their actual knowledge of the method's efficacy.

The **K-Laser** devices are transportable and easy to carry, and due to their size and weight are perfect for out calls where it can be operated even in the absence of electricity thanks to the powerful rechargeable batteries.



c - K-LASER PODIATRIC TREATMENT ON PATIENTS at the Centro del Piede of Mestre - Venezia

Thanks to the research carried out in podiatry, **K-Laser's** advanced technology and resources is made available through specialized **"K-LaserTherapy"** centers and also organizes training courses on the use of the handpieces for the treatment of onychomycosis and warts.



K-LASER CUBE

EXTEND THERAPY ON BIGGER AREAS

THE NEW "K-LASER CUBE EXTEND" HAS BEEN DESIGNED TO BE USED WITH K-LASER DEVICES TO FACILITATE THE TREATMENT OF LARGER AREAS WITH GREATER BENEFITS WITH RESPECT TO SCANNING LASERS.

K-Laser Cube Extend is equipped with a flexible arm and a rotating head with a new optic diffusor of the laser beam; its cone like emission was purposely studied to cover bigger areas. **K-Laser Cube Extend** can deliver the laser beam over a 100mm diameter area and it has a unique design so that it is ergonomic and easy to adjust.

Thanks to **K-Laser Cube Extend's** intuitive software one can deliver a high energy treatment over bigger areas.



K-LASER QRT TECHNOLOGY

K-Laser's long-term commitment to research and design characterizes its developments in user-friendly devices.

QUICK RELEASE TECHNOLOGY (QRT)

HANDPIECE WITH INTERCHANGEABLE OPTICS

This technology was developed due to the need to perform Dynamic Therapy in different medical fields: from Physiotherapy to Podiatry, from Dental to Stomatology.



Variable zoom from 1 to 5 cm²

A **ZOOM** handpiece is of crucial importance to obtain better results, as it gives the possibility to adapt the handpiece to the area and part of the body to be treated depending on the pathology.

Optional Tips:

The principle behind K-Laser's philosophy of dynamic therapy has led to the development of two optional tips that may be fitted onto the handpiece depending on the physician's needs.

ENT Fiber



High Energy Tip



K-LASER

UP CLOSE

CUBE'S SOFTWARE UPGRADES

The **K-Laser** Technology foresees periodical software upgrades, in order to guarantee the highest performances.

ELECTRONIC THERAPY RECORDS: Historical Patients' Archives

The Cube software comes complete with a **history file of all treatments** performed on a single patient, with the possibility to customize a patient's protocols and export them in various formats via **USB**.

K-LASER TROLLEY (optional)

Lightweight, portable and safe. Comes with a **magnetic plate** that secures the devices on the trolley's platform.

RECHARGEABLE LITHIUM-ION BATTERY

K-Laser Cube is equipped with a rechargeable battery for more than 60 minutes worth of uninterrupted treatment.



LIGHT WEIGHT (about Kg. 1,3)

Thanks to its compactness, characteristic of **K-Laser's** products, and transportability, the physiotherapist can choose where to perform the therapy; this makes **K-Laser Cube** the ideal tool in the field of **Medicine, Physiotherapy and Sports Rehabilitation**.

FULL COLOR GRAPHIC DISPLAY LCD touch screen

The liquid crystal, full color display and high definition graphics, guarantee high visibility even under strong light. Furthermore, the use of **touch screen technology** guarantees greater interactivity between **K-Laser Cube** and the user.





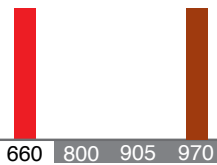
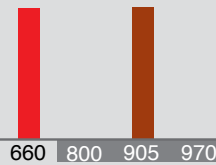
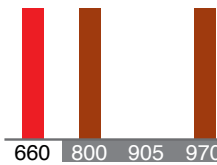
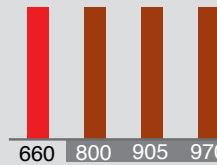
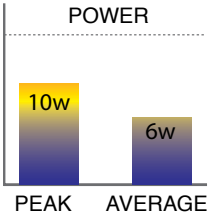
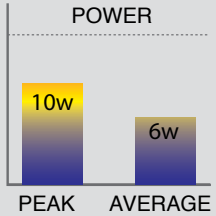
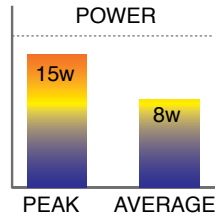
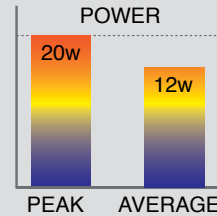




K-LASER CUBE EXTEND



TECHNICAL DATA SHEETS

				
	CUBE	CUBE 2	CUBE 3	CUBE 4
Laser type	Semiconductor Laser			
Laser system	Class IV (IEC 60825-1)			
Classification	Class IIb (CEE Directive 93/42/EEC)			
Wavelength (nm ± 15 nm)	660,970	660,905	660, 800, 970	660, 800, 905, 970
Peak power in ISP mode (W)	10	10	15	20
Average Power in ISP (W)	6	6	8	12
Max Power in CW (W) ± 20%	8	8	12	15
Peak Power at High Energy		8	12	20
Average Power at High Energy		8	12	15
Max Power of 660nm (mW)		100		
Emission Mode	CW (continuous wave), modulated 1 Hz in 20.000 Hz, ISP (Intense Super Pulse)			
Insulation Class	Class II, type B (CEI EN 60601-1)			
Aiming Beam	660 nm ± 15 nm, max. 1mW			
Optional Wireless Footswitch	Finger switch	Finger switch	Finger switch	Finger switch or optional wireless foot switch
Power Supply	100 - 240 VAC, 47 - 63 Hz – Rechargeble Battery			
Display	Full Color LCD Touchscreen Graphic Display			
Dimensions (W x L x H)	7,09 x 7,87 x 7,48"			
Weight	Approx. 2,87 lb			

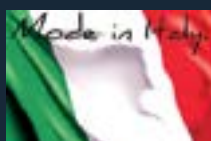


				
	CUBE	CUBE 2	CUBE 3	CUBE 4
Transportable & with Rechargeable battery	√	√	√	√
Emission mode	Continuous wave (CW) + 1-20.000 Hz in 1 Hz steps - ISP (Intense Super Pulse)			
Multi-phase pre-set Protocols	√	√	√	√
Adjustable setting	√	√	√	√
Unlimited patient Data files	√	√	√	√
Handpiece with Adjustable zoom	√	√	√	√
Interchangeable optics	√	√	√	√
Handpiece at high energy		√	√	√
Optional ENT fiber	√	√	√	√
Trolley with Cube Extend optional	√	√	√	√
Upgradeable Software	USB software upgrades			
Special protective goggles	2 pairs			
Wavelength [nm]				
Selectable wavelengths	3 combinations	3 combinations	7 combinations	15 combinations
Intense SuperPulse (ISP)				
Continuous Wave (CW) Power Adjustable from 0,1 Watt				
Warranty	2 year			



For further information you
can visit our website at
www.klaser.eu
or scan the Q-Code and
find out more about K-Laser
Technology

concept: Studio EFFELINO



K-Laser Cube II Rev. 2
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CUBE

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