

get back, faster.



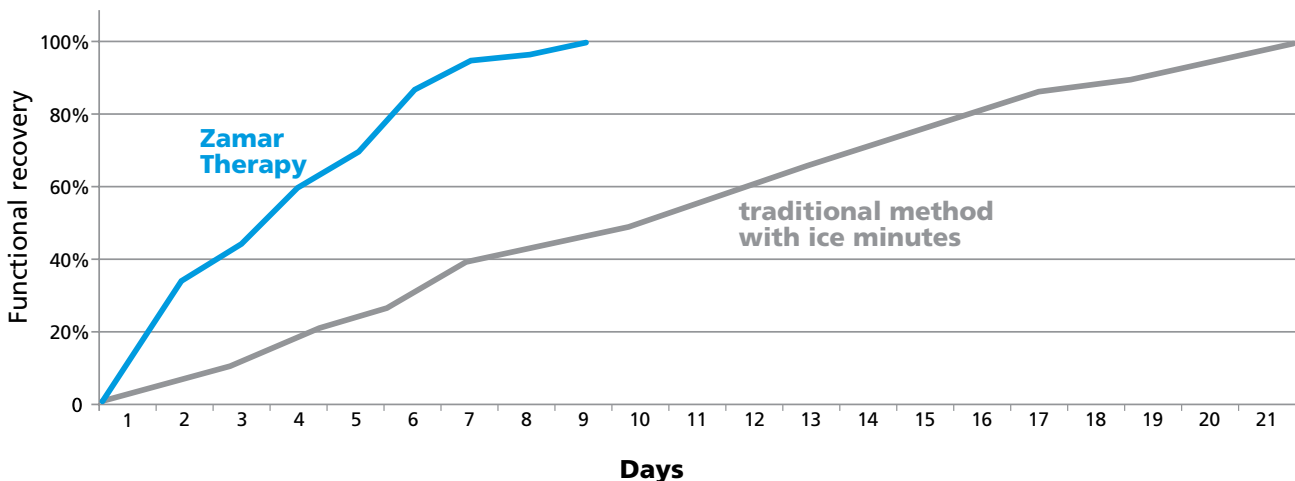


The dynamic management of temperature

Advantages of Zamar Therapy

- If you are recovering from an injury or an operation, Zamar Therapy plays a role in enhancing recovery time.
- Zamar Therapy is a simple therapeutic method, non-invasive, non-aggressive.
- Cryotherapy is essential during the acute stage of the trauma as shown using the R.I.C.E. protocols.
- Thermo-Cryo kinetic - the combination of warm and cold during the sub-acute stage, enables faster reduction of edema and an increase of the elasticity.
- Targeted and selected - each body part is precisely treated through anatomic wraps.
- Constant temperature - the temperature can be set from -5°C to $+45^{\circ}\text{C}$ alternating cold and warm cycles.
- Pressure/Massage, function - Setting the internal pressure within the thermo wrap and provides lymphatic massage on the treated part.
- Programmable cycles - thanks to the touch screen it is possible to utilise the pre-set cycles for varying treatments or create your own protocols, even using a USB device.

Decrease down up to 60% of recovery times





Cryotherapy

When the term Cryotherapy is used, it refers to the use of cold for treatment purposes; actually, cold thanks to its analgesic and anti-inflammatory properties is able to anaesthetise a painful muscle or joint for a certain period of time. The use of intermittent cryotherapy following an injury decreases the repercussions resulting from inflammation or a tear of muscle fibres, especially when dealing with acute musculoskeletal injuries. The biological changes stimulated by cryotherapy combined together lead to the indicated therapeutic effects:

- Antiphlogistic effect: cell metabolism is slowed and thus the production and release of inflammatory chemical mediators is reduced.
- Anti-oedematous effect: cryotherapy is widely recognised for treating oedemas, in particular post-injury ones. This anti-oedematous effect is connected with the anti-phlogistic action and vasoconstriction which reduces blood extravasations of the tissues.
- Antalgic effect: the perception of pain is reduced since the cold obstructs the nerve endings, slowing down nerve conduction of the algogenic impulses and limiting local inflammatory phenomena.
- Muscle relaxant effect: cryotherapy, reduces muscle tone and spasticity. To achieve these outcomes, cryotherapy sessions need to be sufficiently long; otherwise when applications are too short, they act on the nociceptors which cause reflex muscle guarding.



Thermotherapy

Heat increases tissue elasticity. This outcome is clearly visible on the joint capsules, tendons, muscles and in the structures where there is a strong presence of collagen fibres. It is also known that heat is able to catalyse all of the body's biochemical reactions and to significantly increase the amount of oxygen and nutrients in the tissues: this leads to a development of metabolism for the treated part. The treatment which uses heat can be employed in various situations, bearing in mind that its use is intended for injuries where the acute phase has ended. The use of heat is beneficial in cases of oedema caused by vein or lymph stasis. This type of treatment is also suitable for improving and speeding up the healing of tissues in cases of muscle, tendon and ligament contusions, sprains, bursitis, tears and strains. The application of heat also makes it possible to handle spasms caused by muscle fatigue since it helps, get rid of the lactic acid which collects in the muscle.

Thermotherapy effects:

- Hemodynamic effect: heat increases blood flow which helps to eliminate the waste which accumulates in tissues, thus increasing oxygenation and obtaining a better intake of nutrients.
- Metabolic effect: thanks to heat, the body's biochemical reactions are faster
- Analgesic and muscle relaxing effect: the heat is able to lower the activity of chronic peripheral pain receptors.
- Increase in tissue viscoelastic properties: heat increases tissue elasticity

The Contrast Therapy or Thermal Shock

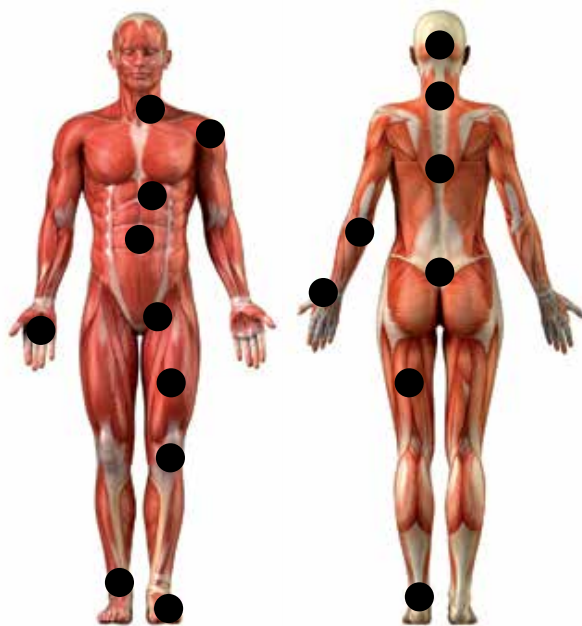
The combined use of Cryotherapy and Thermotherapy in quick succession – from 0° to 40° C – creates a vasoconstriction followed by a vasodilation on the treated area. There are several benefits:

- Indirect analgesic effect
- Increase of microcirculation at connective level
- Facilitation of muscle setting
- Reduction of stiffness connective tissues
- Inhibitory action on trigger-points
- Effective vascular exercise
- Increase of local circulation



treated symptomatology

The application of cold is highly recommended for various types of musculoskeletal contusions, tears and injuries. There are at least two purposes to pursue with the use of cold: a reduction of the perception of pain and a decrease of the effusion of liquids thanks to its ischemic action.



Zamar Therapy is used to treat:

- Muscular System
 - Contusion
 - Contracture
 - Lesion I - II grade
 - Haematoma
- Tendon System
 - Tendonitis
 - Tenosynovitis
 - Tendinopathy
- Osteo-Cartilage System
 - Contusion
 - Post Fractures
- Capsular-Ligaments Structure
 - Distortion
 - Contusion to Ligaments
- Post Surgery
 - Ligaments
 - Meniscus
- Aesthetic surgery
 - Rhinoplasty, breast surgery
 - Liposuction and mesotherapy

Cryotherapy is useful in cases where acute inflammatory states occur resulting from any type of injury, for example: muscle, tendon and ligament lacerations, contusions, sprains and strains, myalgia and muscle spasms, etc., in post-op injury (in particular when the operation was on the musculoskeletal apparatus) and in aesthetic surgery.

Thermotherapy can be alternated with the use of cold in those occasions where normal blood circulation is compromised, for example during the sub-acute or chronic phase caused by some trauma and inflammatory conditions. This alternation of hot and cold leads to a succession of vasodilatation and vasoconstriction, thus increasing blood flow to the treated area.



A wrap for each requirement

- Cold and warm is conveyed through insulated pipes and insulated thermo wraps ,secured with Velcro strips
- Anatomic wraps remain soft in any condition and can be easily adapted to the part to be treated
- Zamar Therapy offers a comprehensive range of thermo wraps specific for each part of the body



Zamar's anatomic wraps allow a perfect transfer of the warm and cold on the part of the body being treated thanks to the anatomic shape that increases the contact with the body surface.

The wraps are available in disposable sterile packs for hospital use or supplied with a



"non-woven fabric" sheet for sterile use on more than one patient.

The hi-tech fabric maintains the wrap's flexibility and softness even when used at with sub-zero temperatures, as applied during the acute stage, so avoiding the burning from cold. Through the Zamar wraps it is possible to apply a pressure, alternating or continuous, programmable from the control panel for an important lymphatic function. Specific wraps are available each body part : shoulder, elbow, hand, wrist, abdomen, face, thorax-breast, hip, thigh, knee and ankle. Zamar's continual work with Hospitals and specialists enables continuous developments and improvement with new wraps .



Insulated pipes with No Leak connectors

new touch screen monitor provides simplicity and full control



Operators have access to a number of preset programs that allow the application of the therapies. The operator may also freely create and store his own specific programmes/protocols, adapted to meet the needs of his patients.



The touch screen uses an amorphous silicon TFT display which makes it easy to read even in critical light conditions.



The intuitive touch-screen interface, with simple icons and graphics, allows the operator to use the system to its full capability by constantly monitoring the patient.

These new therapy cycles will be available thanks to the cooperation with international Orthopedic and Physiotherapist specialists.

4

2 models, maximum versatility.

Zamar Therapy products
are electro medical units
Class IIa - Patent n° 0342564681



ZT Clinic¹ - The Solution for Hospitals and Rehabilitation Centres

ZT Cube - The portable solution



ZT Clinic

Suitable for rehabilitation, designed and built for complex requirements of clinics and hospitals with up to 2 patients receiving the same treatment at the same time.

- Application cold -5° C and warm +45°C.
- Thermal shock feature – from 0° to 40°C in 60 seconds
- Handle up to 4 wraps at the same time
- 10" control panel touch screen
- Settings for time, temperature & pressure of the treatment
- Transportable on silent and smooth wheels
- Cooling fluid NON-TOX to the skin
- Temperature and time alarms indicators

ZT Cube

Portable unit with a practical handle and a bag with wheels for easy transportation, plus an optional trolley with shelves is also available. The perfect solution for Rehabilitation Rooms and Sport Centres.

- Application cold 0° C and warm +40°C.
- Handle up to 2 wraps at the same time
- 7" control panel touch screen
- Settings for time, temperature & pressure of the treatment
- Cooling fluid NON-TOX to the skin
- Temperature and time alarm indicators



Technical Data



	ZT CUBE	ZT CLINIC
APPLICATION	COLD / HOT	COLD / HOT, THERMAL SHOCK
TEMPERATURE RANGE	0° C / + 40° C *	- 5° C / + 45° C *
SCREEN	TOUCH SCREEN 7" TFT	TOUCH SCREEN 10" TFT
WRAPS	UP TO 2 SIMULTANEOUSLY	UP TO 4 SIMULTANEOUSLY
TRANSPORTATION	PORTABLE	TRANSPORTABLE
DIMENSIONS L x W x H	325 x 375 x 330	365 x 550 x 925
WEIGHT	16.5 Kg	54 Kg

* In relation to the type of band. The environment and conditions of use



recommended by

- Dr. Michele Zasa - Mobile Clinic in the World
Utilized by bikers of World Moto GP and Superbike



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