



The devices for successful laser therapy

The output power and wavelength of the therapy lasers used are optimized so that there is no heat effect during treatment.

HILARIS TL or HILARIS TL eco therapy laser:

Compact, powerful, battery-operated - ideal for mobile use in veterinary medicine.

HILARIS TL therapy laser incl. Haemo-Laser® patient adapter:

Therapy laser HILARIS TL eco:



Literature references:

- L** G. Ambronn - Laser and magnetic field therapy in veterinary medicine
- L** R. Muxeneder - Intravascular low-level laser - blood irradiation - a systemic basic therapy
- L** A.Füchtenbusch/P.Rosin - Laser therapy and acupuncture in horses - therapy plans
- L** A.Füchtenbusch/P.Rosin - Laser therapy and acupuncture in dogs and cats - therapy plans

Low-level laser therapy in veterinary medicine



HELTSCHL
Medizintechnik

Hoheneckstrasse 9
A-4713 Gallspach
www.heltschl.at

Phone: +43 (0)7248/65 7 96-0
Fax: +43 (0)7248/65 7 96-11
office@heltschl.at

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Biological effect of low-level laser therapy

Promotion of wound healing:

The laser light absorbed by the tissue improves the availability of ATP (adenosine triphosphate), which is the cell's fuel. By activating cell metabolism, the division rate of fibroblasts and epithelial cells is accelerated, macrophage activity is promoted and phagocytosis is increased. These effects enable faster wound healing.

Analgesic effect:

The release of pain-inhibiting biomediators or neurotransmitters (serotonin, endorphins) is promoted. The release of pain-triggering or mediating biomediators (substance P, bradykinin, prostaglandins) is inhibited. This cascade, which has been proven in several studies, has an analgesic effect.

Anti-inflammatory and anti-edematous effect:

The biomediators listed above also have an anti-inflammatory effect and, by improving microcirculation, an anti-oedematous effect. By macrophage activity, the local defense is also improved.

Possible applications:

- └ Poorly healing and chronic wounds
- └ Bite wounds, injuries and hematomas
- └ Joint pain
- └ Otitis in dogs
- └ Scars after surgical procedures
- └ Gingivitis and stomatitis
- └ Laminitis
- └ Hygroma
- └ Mastitis
- └ Haemo-Laser® - Therapy



Advantages of low-level laser therapy

- └ Faster healing with laser therapy improves the animal's quality of life.
- └ Laser therapy is a form of treatment that has no side effects, is well tolerated by the animals and does not put any strain on them.
- └ Consistent use of laser therapy can save on dressing materials and care time.
- └ After the first treatment, there is usually a reduction in pain in acute pain conditions.

Possible applications of laser blood irradiation (Haemo-Laser®)

Haemo-Laser® therapy uses the energy of red laser light to directly irradiate the blood. The laser light is guided directly into a sufficiently large vein via a special disposable light guide and thus has a direct effect on the individual blood components.

The following effects can be achieved with Haemo-Laser® therapy:

- └ Increase in erythrocyte deformability
- └ Decrease in erythrocyte and thrombocyte aggregation
- └ Increase in the deformability of the extracellular "cloud" (boundary layer between cell and blood plasma)
- └ Decrease in blood viscosity

Areas of application:

- └ Circulatory disorders, especially in older animals
- └ Chronic wounds (ideal in combination with local low-level laser therapy)
- └ Chronic inflammatory diseases of the musculoskeletal system (osteoarthritis, polyarthritis)
- └ Liver and kidney diseases (e.g. renal insufficiency)