



BIOPTRON Pro 1



BIOPTRON 2



BIOPTRON Compact III

Is BIOPTRON Light Therapy the same as laser therapy?

No, light therapy is *not the same* as laser therapy. Light emitted by a BLT device differs from laser light in several ways.

- **BLT** contains light from a *wide range* of wavelengths (vs. the narrow bandwidth of laser light).
- **BLT** emits light that is of *low-energy* so there is only a minimal heating effect, making the treatment *safer* (vs. the high-energy beam from a laser that may generate a great deal of heat).
- **BLT** devices emit light with a *wide beam* to allow exposure of *larger treatment area* (vs. the usually much narrower beam from a laser).

Is BIOPTRON Light Therapy expensive?

BLT is cost-effective - [ADD COST INFORMATION HERE.](#)

Is BIOPTRON Light Therapy safe?

Yes, light therapy with BLT is safe. To date, there are no known adverse effects associated with BLT.

Please add local contact details here:

BIOPTRON Light Therapy can be used to treat certain conditions in newborn babies, particularly those that need to stay in hospital after birth (commonly in the Intensive Care Unit, ICU). The types of conditions include;

- **Inflammation of the veins.**
- **Pressure sores.**
- **Traumatic injuries.**
- **Skin rash (diaper area).**

Inflammation of the veins

occurs when needles are repeatedly inserted. This can occur during repeated injections of medication, removal of blood for testing, or for the infusion of intravenous (IV) fluids or blood transfusions. The blood vessels of small child are delicate and fragile, and the repeated trauma from a needle causes the blood vessel to collapse and the surrounding tissue to become inflamed and/or bruised.

Apart from the discomfort endured by the child, collapsed veins and inflamed tissue make it difficult for medical staff to re-insert a needle or IV fluids/blood.

Pressure sores

occur in anyone (young or old) who is unable to move part or all of their body normally. A newborn baby in ICU may be seriously unwell and may have IV lines (and/or other medical equipment) attached to their body that prevent normal movement. Pressure sores occur when the force of the body's weight compresses the underlying tissues and prevents normal blood flow. Skin cells are starved of oxygen and nutrients and cannot function normally: they eventually die and fall off, forming an ulcer (pressure sore). Pressure sores can form in a matter of hours and can be extremely difficult to treat.



Apply for 2-3 mins. 2 times a day.



Indications in Newborn Babies

information for patients

Traumatic injuries include cuts, abrasions and bruises. Cuts are caused by sharp objects; the wound has straight edges and may bleed a lot if a blood vessel has been cut through.

Abrasions occur when the surface layers of skin are rubbed against causing friction.

Bruises occur when blood vessels beneath the skin rupture and blood leaks out into the tissue.

Skin rashes in the diaper area in newborn babies can be caused by a yeast infection (caused by *Candida albicans*). The yeast grows in warm, damp conditions; such as those found in the groin area covered by a damp diaper. The infected area becomes red and sore and may contain small pustules.

BIOPTRON LIGHT THERAPY a new and effective treatment for relieving the symptoms of pain and inflammation in newborn babies.

BIOPTRON Light Therapy in Newborn Babies

BIOPTRON Light Therapy may help to treat these conditions by relieving pain and inflammation, by promoting a healing response and by stimulating the immune system.

A recent study was carried out in newborn babies admitted to the Life Support and Intensive Care Unit with various illnesses (as listed above)!. The babies were given BIOPTRON Light Therapy for 10 minutes and for 3 or 4 sessions per day. The babies responded well to the treatment and there were no side effects; the best results were achieved for treatment of vein inflammation. Pain was reduced within 24 hours; skin problems improved within 2 to 3 days

The infants' parents were very happy with the treatment and doctors concluded BIOPTRON Light Therapy that was a good treatment option in newborn babies.



1. Dr O Cerná, Department of Pediatrics & Adolescent Medicine, General University Hospital Prague, Czech Republic. Congress Proceedings Abstract Book, Prague 2005

How do I use BIOPTRON Light Therapy on my baby?

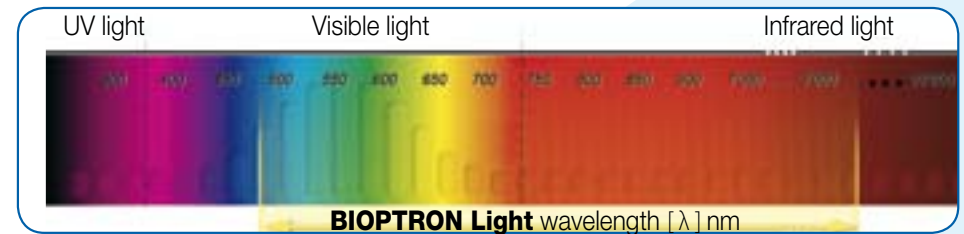
It is so simple! BIOPTRON Light Therapy is completely safe and easy to use.

The BIOPTRON Light Therapy device can easily be positioned so the healing light shines on any areas where an injury is present. For cuts, abrasions or bruises, treatment should be applied for 10 minutes per session and for 3 to 4 sessions per day for as long as required until improvement is observed. For injury caused by needles, intravenous lines, etc, treatment should be applied for 10 minutes per session and for 3 to 4 sessions per day for as long as required until improvement is observed.

What is BIOPTRON Light Therapy?

Light is a form of energy and has 'wave-like' properties; the difference between the various colours of light is determined by their *wavelength*. Light has been used as a healing tool since ancient times.

Scientists now have a better understanding of which components of natural light are useful in the stimulation of healing. This has led to the development of optical devices to produce various types of 'medically useful' light, such as the *BIOPTRON Light Therapy (BLT) System*.



What effect does BIOPTRON Light Therapy have on the body?

BIOPTRON Light Therapy devices emit light containing a range of wavelengths that correspond to visible light plus infrared radiation, both of which have been reported to stimulate biological reactions. Importantly, no *harmful ultraviolet (UV) radiation* is present in BLT.

When the BLT device is held over the skin surface, energy from the emitted light penetrates the underlying tissues. This produces a biological response, called *photobiostimulation*, causing various reactions within these tissues that may result in the reduction of pain and promotion of healing.

