



The Medical Power of Light

Photobiomodulation and Pain Management

The ideal solution for wound healing and pain reduction

- Highly effective pain reduction
- Improved healing
- Non-invasive
- Fast and simple
- Patient and practitioner friendly

Fotona
choose perfection

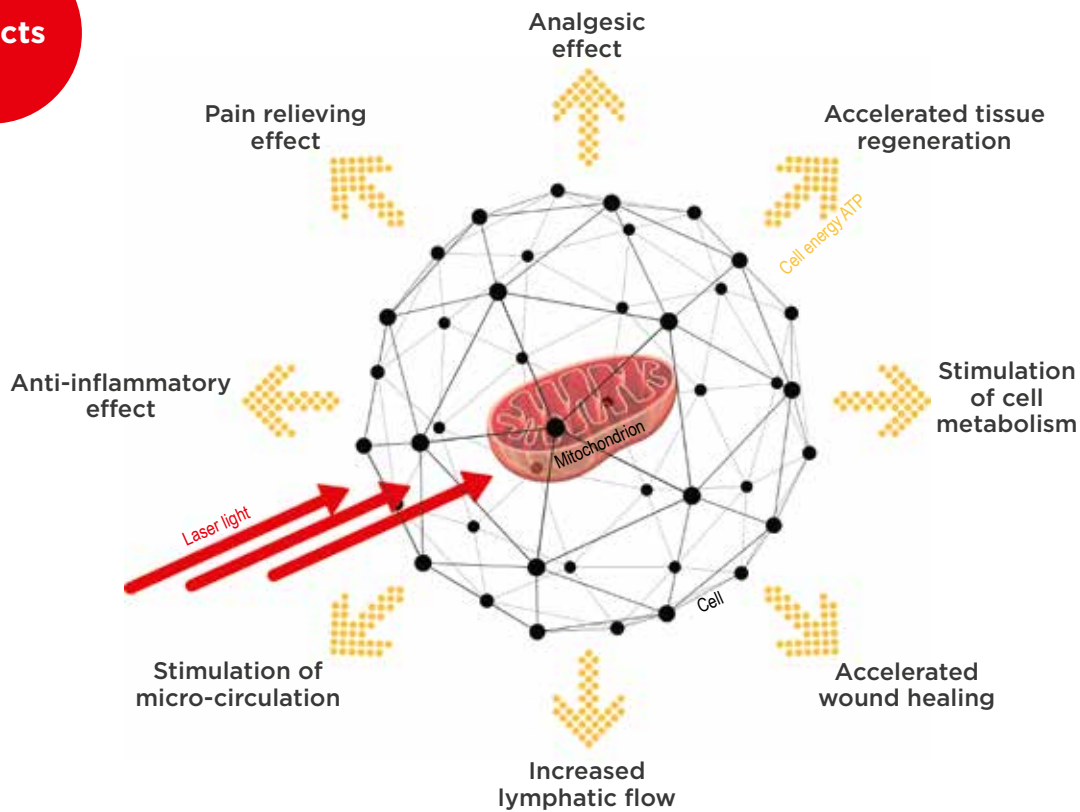
www.fotona.com

Benefits of Photobiomodulation Therapy (PBM)

PBM utilises low-level visible to near-infrared light energy, which stimulates cells to naturally heal, relieve pain and reduce inflammation. The process creates three key mechanisms of action:

1. PBM energy is absorbed by cytochrome c oxidase in mitochondria in the cell and results in an increase in ATP, a natural **fuel for cell activity and metabolism**.
2. The process creates mild oxidants (ROS), which leads to gene transcription and **cellular repair and healing**.
3. PBM therapy helps to **dilate blood vessels and improves blood circulation** through the action of the signaling molecule Nitric Oxide.

Effects



Dental Trauma Treatment



Before treatment / day 0



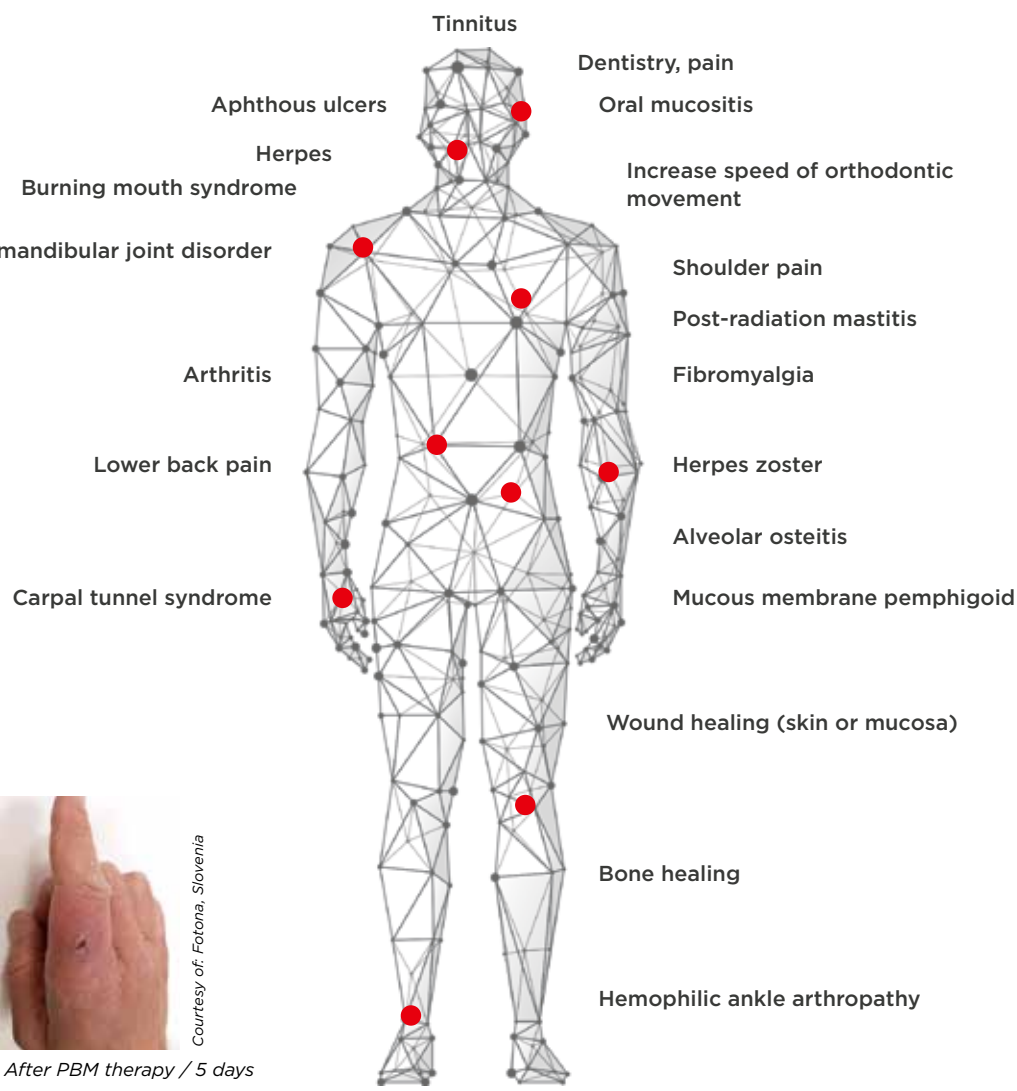
During PBM therapy / Day 8



After complete treatment

PBM therapy with Fotona's latest MarcCo™ handpieces can be used for a wide variety of conditions

Conditions



Bacterial Cellulitis Treatment



Treatment of facial nerve palsy due to Herpes Zoster infection



Courtesy of: Dr. Jason Pang, Australia

Available in three sizes:

MarcCo™ L, MarcCo™ M, MarcCo™ S



MarcCo™

The Latest Line of Handpieces for Photobiomodulation and Pain Management

- Enables fast, non-invasive and effective treatment
- A unique, collimated & homogenous beam profile
- Sterilizable spacers for increased safety
- Modern ergonomic design

MarcCo™ handpieces can be used with the following Fotona laser systems:

Dentistry

LightWalker®, SkyPulse®

Aesthetics and Gynecology

SP Dynamis®, TimeWalker Fotona4D®, TimeWalker IntimaLaser®

To learn more about MarcCo[®]
and what it can do for your practice contact us at info@fotona.com today.

References:

de Freitas LF, Hamblin MR. Proposed Mechanisms of Photobiomodulation or Low-Level Light Therapy. *IEEE J Sel Top Quantum Electron.* 2016;22(3):7000417.
Hamid MA. Low-level Laser Therapy on Postoperative Pain after Mandibular Third Molar Surgery. *Ann Maxillofac Surg.* 2017;7(2):207-216.