



## MLS Laser Therapy Information

### *What is MLS?*

- MLS stands for Multi-Wave Locked System. The MLS Therapy Laser treats pain, inflammation, and arthritis.
- The MLS Laser is a Class IV Laser and uses multiple synchronized diodes.
- It features 2 wavelengths: 808 nanometers and 905 nanometers. The wavelengths are in the infrared spectrum, meaning they are invisible to the eye, but can be seen using a cell phone camera.
- The 808 wavelength is for inflammation, and is long lasting. The 905 wavelength is analgesic and is fast acting. Together, they are very effective.
- There are over 3,000 studies performed in the last three decades that validate the efficacy of laser therapy.
- Laser therapy was cleared by the FDA in 2002 and is currently being used by a variety of medical specialties, as well as professional sports teams, including the Dallas Cowboys and Cleveland Cavaliers.
- The laser can penetrate 3-5cm deep and generates no heat. There are no known harmful effects.

### *How Do Lasers Work?*

- Laser energy stimulates cells to remove toxins, from the cells and allow oxygen and food loads into the cell.
- They block the pain signals to the nociceptors in the brain, and release endorphins and enkephalin.
- Laser light increases ATP production and cell growth. It brings blood flow to the area and increases angiogenesis of capillaries.
- MLS Laser Therapy can actually decrease healing time by 30-40%.
- In fractures, it will increase osteoblast production within the first 10 days only.
- The MLS Laser stimulates the mitochondria in cells to jump start the body's own healing process.
- Like an antibiotic, each treatment is cumulative in its effectiveness, building off the previous treatments.
- Acute patients will need 6 treatments.
  - o 2 treatments per week for 3 weeks.
- Chronic patients will need 12 treatments
  - o 3x per week for 2 weeks which should be Mon-Wed-Friday then 2x per week for 3 weeks.
- Acute patients may experience relief before they leave the office; the maximum benefit will be experienced in 5-

7 hours post treatment.

- For chronic patients, it is important to let the patient know it may take up to 4 treatments before they feel any difference.
- For arthritic patients, 10 treatments to begin are needed, then a treatment once a month or every other month to maintain their level of comfort.
- Some sprains and strains only required 2 or 3 treatments and they can be delivered 24 hours apart.
- Laser treatments take less than 10 minutes each and most patient feels nothing during the treatment.
- While laser therapy is among the most advanced technology in all of medicine, it is too new to be covered by insurance. The good thing is that it is non-invasive, an alternative to addictive pain medications, and maybe an alternative to surgery in some cases.

### *Conditions Treated with MLS Laser Therapy*

Arthritis & Bursitis	Repetitive Motion Injuries	Occupational Injuries
Backache & Sciatica	Hip, Knee, & Lumbar Pain	Sprains & Strains
Rotator Cuff Tendonitis	Achilles Tendonitis	Sports Injuries
Neck & Shoulder Injuries	Epicondylitis	Heel & Foot Pain

### *Laser Therapy is contraindicated for the following Patients and Situations:*

Those taking anticoagulants or medication that is known to increase sensitivity to sunlight

Patients who are pregnant

Patients with hemorrhagic predisposition

Areas of suspicious, potentially, or known cancerous tissue

Areas of active hemorrhage

The sympathetic ganglia

The neck (thyroid or carotid sinus region)

Those suspected of carrying serious infectious disease and/or disease where advised to suppress heat/fever

Those with seizure disorders triggered by light

Patients with an HIV positive history

Over or near bone growth centers until bone growth is complete

Over areas injected with steroids in the past 2-3 weeks

Over the vagus nerve

Over the thoracic area if patient is using a pacemaker