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 encephalin.
- 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.
  - 2 treatments per week for 3 weeks.
- Chronic patients will need 12 treatments
  - 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**

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<th>Occupational Injuries</th>
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<td>Epicondylitis</td>
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**Laser Therapy is contraindicated for the following Patients and Situations:**

- Those taking anticoagulants or medication that is known to increase sensitivity to sunlight
- Those suspected of carrying serious infectious disease and/or disease where advised to suppress heat/fever
- Patients who are pregnant
- Those with seizure disorders triggered by light
- Patients with hemorrhagic predisposition
- Patients with an HIV positive history
- Areas of suspicious, potentially, or known cancerous tissue
- Over or near bone growth centers until bone growth is complete
- Areas of active hemorrhage
- Over areas injected with steroids in the past 2-3 weeks
- The sympathetic ganglia
- Over the vagus nerve
- The neck (thyroid or carotid sinus region)
- Over the thoracic area if patient is using a pacemaker