

Laser Treatment for Burn Scars

When the skin suffers a burn, trauma, or surgery, a scar forms as a normal part of healing. Some scars may be large, red, and uncomfortable. Other scars can even limit movement. Laser can be used, in some cases, to reduce the functional limitations caused by scar tissue.

Laser Treatment

Carbon Dioxide (CO₂) Laser

The carbon dioxide (CO₂) laser beams enter the top skin layers reaching into the dermis. It disrupts the collagen in the scar and helps the scar tissue to remodel. The CO₂ laser is used to release tightness over multiple sessions.

Pulsed Dye Laser (PDL)

The PDL is a non-invasive treatment that uses a focused beam of light. The light is converted into heat and, over time, remodels collagen within the scar. PDL is used to reduce scar redness and enhance flexibility.

Laser Facts

Laser scar revision is not a cosmetic procedure. It is used to treat scars that affect your ability to move and function. You can start laser treatment as soon as 3 months after your wounds have healed. You may need to repeat the treatment every 6-8 weeks for a total of 3-6 sessions.

Both types of lasers can be used in the same session and work together. Laser treatment is used along with physical therapy (PT) and occupational therapy (OT) and compression garments.

Side Effects

- Mild blistering
- Skin dryness
- Bruising
- Temporary color changes (should go away after a few weeks)

Medicine Interactions

Certain medicines and health conditions can be harmful with laser surgery. Talk to your surgeon about the medicines you are taking.

Before Treatment

Insurance Approval

Our schedulers will work with you to get prior authorization from your insurance before your treatment is scheduled.

Medicines

A medicine review will be completed with your doctor during the appointment prior to your surgery.

Diet

Do not eat or drink anything after midnight the night before treatment. You can take approved medicines with a small sip of water the morning of your treatment.

Compression

Bring your compression garments with you. You will wear them right after treatment.

During Treatment

Sedation

In most cases, you will have general anesthesia and a laryngeal mask airway (LMA) during treatment.

Eye Protection

We will use special eyewear to protect your eyes from the laser during the procedure.

Between Treatments

You will have therapy and compression PT/OT visit in between sessions to check your range of motion.

After Treatment**Pain**

Pain is the same for both laser types and is like a mild sunburn. It may last a few hours to a few days. Use over the counter medicine and/or ice to the area.

Medicine

Most people do not need antibiotics, opioid pain medicines, or dressings. If you have a history of cold sores, you may need an oral antiviral to help prevent them.

Activities

Most people resume their normal routine within 1 day.

Skin Care

Skin may appear red and/or swollen. **Do not** pick at crusting or scabbing. Wash and apply scent free lotion 2-3 times per day. Limit sun exposure and always use sunblock for when exposed to the sun. For the first 2 weeks after treatment, the area will be sensitive.

Avoid:

- Scented lotions or soaps
- Exfoliant creams
- Acne creams or gels
- Loofa sponges and aggressive scrubbing
- Swimming pools and spas with chemicals/chlorine
- Activities that cause extreme sweating
- Shaving

Risks

Certain diseases and health conditions can make your skin more sensitive to UV rays and increase risk of blistering after treatment. Talk to your surgeon about any health conditions that you have.

When to Call

- Severe pain
- Signs of infection
- Fever greater than 101° F
- Any other concerns
- If you think you are having a cold sore flare in the treated area

Who to Call

Burn and Wound Clinic
Monday – Friday, 8:00 am – 5:00 pm
(608) 264-8040

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 3/2025 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#8237.