

Vascular Laser (Pulsed Dye) Pre and Post Care Guidance

What is a Pulsed Dye (Vascular) Laser?

A Pulsed dye laser (PDL) is a variety of laser that uses an organic dye to create a concentrated wavelength of light to target blood vessels. These intense bursts of light are absorbed by blood inside the vessels but keep the surrounding skin safe. After treatment the surrounding tissue absorbs the damaged vessels and they fade from sight. PDLs are designed treat redness in the skin due to rosacea, sun damage (poikiloderma), scars and telangiectasias (broken blood vessels) along with vascular growths and birth marks such as cherry angiomas and port wine stains.

How many treatments does it typically take?

Most patients need more than 1 treatment to achieve their goals, on average 3 for conditions such as rosacea. Over time new vessels will form, so many patients will plan a touchup treatment periodically for maintenance.

What are the potential side effects of PDL?

Swelling: Swelling is the most common side effect following treatment, especially under the eyes. It may occur within a few minutes after treatment and often lasts 3-5 days. Application of cold compresses and sleeping on extra pillows will help.

Pain: The snapping and burning sensation of the laser is most notable during treatment and improves over a few hours afterwards. Pretreatment with a numbing cream will provide comfort during the procedure along with cooling packs and laser enzyme gel following treatment.

Bruising (purpura): Bruising may occur and typically resolves over 5-10 days. Blood thinning medications and supplements may increase the risk of bruising.

Reactivation of cold sores: For those with frequent cold sores a Rx antiviral medication for prevention such as valacyclovir may be recommended around the time of your treatment.

Skin discoloration/darkening: This is more common in patients with darker skin types and typically fades over 2-6 months with rigorous sun protection.

Persistence of vessels: Some lesions may not go away despite our best efforts and technology.

What can I expect during treatment?

You will be joined in the treatment room with the medical assistant, laser technician and your provider who will be administering the laser. Your eyes will be covered with gauze pads and protective titanium goggles to keep them safe. The laser sends a cold puff or spray prior to delivering the light pulse to protect the surface of the skin. The laser pulse itself feels like a sting or the light snap of a rubber band. After treatment the area feels hot and looks red and splotchy like a sunburn. Occasionally early swelling or hive like bumps may form a few minutes after treatment. Depending on the area treated and your response, cold compresses and a laser enzyme gel may be applied in the cool-down room prior to departure from clinic.

How to I prepare ahead of time?

Be rigorous about sun protection for at least 4 weeks prior to your appointment. Avoid sun tanning and excess sun exposure. Additional color in the skin will interfere with the laser and may increase the risk of complication and decrease the effectiveness of the treatment.

Apply LMX numbing cream 90, 60 and 30 minutes ahead of your appointment time to the expected treatment areas (usually the nose, cheeks and chin). This can be purchased online and sometimes at your local pharmacy. Arrive at the clinic with nothing on your skin other than your LMX numbing cream, meaning no other lotion, cosmetics or sunscreen.

If you have a history of frequent cold sores begin your Rx tablet antiviral medication (acyclovir, valacyclovir) 1 day before your treatment and continue for 3 days after.

Have a mild unmedicated cleanser, a gentle moisturizer and mineral sunscreen ready at home.

Supplements: Discontinue Fish oil, garlic, ginger, ginkgo, ginseng, feverfew, licorice and danshen supplements 1 week prior to your procedure. These may increase the risk of bruising.

Aspirin: If you take aspirin for heart health but have not been recommended to take this medication by your physician because of a medical condition please stop your aspirin 1 week prior to your treatment.

How do I care for my skin after PDL treatment?

After treatment the skin is delicate so handle it with care.

Stinging and warmth of the skin can last for several hours. Cool compresses, a cold fan and Tylenol can be used for comfort. Wrap cold compresses in a soft cloth and apply for 10-15 min per hour for the first 4 hours if needed.

Swelling is expected after treatment and can last for 3-5 days. Sleep with extra pillows under your head for additional height to reduce swelling.

Wash with a gentle cleanser once to twice a day with your fingertips only. Avoid rags, cleansing brushes or anything abrasive on the skin.

Apply a gentle moisturizer or Elta MD laser enzyme gel 2-3 times a day to help protect the skin and speed healing.

Apply a mineral sunscreen (SPF 45+) to reduce risk of discoloration.

You may resume cosmetics the day after treatment as tolerated. Make sure makeup brushes are clean and there are no crusts or scabs on the skin before you resume cosmetics.

You may consider a vitamin K cream or arnica montana cream to try to resolve bruising faster.

If a crust or scab occurs avoid picking or scratching it off. Apply an ointment such as Aquaphor or CeraVe healing ointment to areas of scabbing or crusts and allow it to come off naturally.

You may shower normally following treatment, but delay soaking in hot tubs, saunas and intense exercise until swelling has resolved and the skin surface has fully healed (about 7 days)

Plan to stay home from work the day of your treatment and possibly a few days after because of swelling and redness. We often treat at the end of the week to allow recovery over the weekend.

You may need to adjust your social calendar to account for a few days of active skin peeling (typically days 3-5 after the peel).

We are looking forward to working together towards a goal of healthy beautiful skin.