



Laser Skin Resurfacing

Thank you for choosing Dr. Byrne for your upcoming surgery. We want you to have the best and safest experience possible. If you have any questions or concerns, please do not hesitate to contact our office. We look forward to helping you achieve your goals!

Important Phone Numbers

- **Office/Appointments:** (410) 955-4985
- **Belcara Health:** (410) 296-0414
- **Lou Ellen Michel, R.N.:** (410) 583-7183
- **Evenings/Weekends Emergency:** (410) 955-5000 – *please ask for the ENT resident on-call*

General Information

- **Laser skin resurfacing** seeks to improve skin aging by removing the outer layers of the skin to induce new collagen formation. This can create a more youthful appearance to the face due to improvements in skin texture, skin tone/color, and wrinkles.
- The **Er:YAG** laser is used to achieve these goals. Although the carbon dioxide laser is also frequently used for laser resurfacing, many studies demonstrate that the Er:YAG laser is safer, more efficient, and precise, so this is our preferred laser of choice.
- **Benefits:** The best candidates for laser skin resurfacing are individuals who are looking for improvement, not perfection. With realistic expectations, good health and mindset, the overwhelming majority of patients appreciate significant benefit in facial rejuvenation!
- **Risks:** All procedures involve a certain amount of risk and limitations. Although the risks of laser skin resurfacing are overall quite low, potential complications from surgery include and are not limited to milia (bumps in the skin due to trapped skin cells), acne exacerbations, dermatitis, infection, prolonged redness, hyperpigmentation (darkening of the skin), hypopigmentation (lightening of the skin), scarring, and ectropion (lower eyelid malposition).
- **Alternatives:** The alternative for laser resurfacing is not to undergo the procedure. Alternative methods of resurfacing include medium chemical peels and dermabrasion. Alternative treatments that are less effective but are also associated with less downtime are daily tretinoin, superficial peels, or microdermabrasion.
- **Surgery and General Postoperative Expectations:**
 - Laser resurfacing is generally performed at an ambulatory surgery center as an outpatient (go home the same day). Most patients prefer to undergo the procedure under general anesthesia or twilight sedation.
 - The areas treated will be red, swollen, and peel following the resurfacing. It takes about 7 to 10 days for a new skin layer to form, depending on depth of resurfacing. Frequent wound care will be required during this initial healing period.
 - It is normal to have a mild sunburned appearance for up to 4 to 6 weeks following the procedure.

What You Will Need:

- Prescriptions (**pain medication given day of surgery and antiviral and anti-nausea medication given prior to surgery**)
- Gentle Cleanser (if you do not have one we may recommend one for you)
- Aquaphor
- Ice pack or cold compress

Before Surgery:

- **Preoperative Evaluation:** It is mandatory that you obtain a preoperative physical within 30 days of your surgery date. This may be arranged with your primary care physician or in the preoperative clinic at Johns Hopkins. Depending on your medical history, you may also need an Anesthesia evaluation prior to surgery.
- **Medications to Avoid:** Please avoid the following medications for a minimum of 1 week prior to surgery.
 - Aspirin or aspirin-containing products
 - Non-steroidal anti-inflammatory drugs (NSAIDs), i.e. Ibuprofen, Motrin, Advil, Aleve, Naproxen, etc.
 - Ginkgo biloba, ginseng, vitamin E supplements
- **Nothing to Eat/Drink After Midnight:**
 - You must **NOT** eat or drink anything after midnight on the night before your operation.
 - An exception can be made for some essential prescription medications; please consult with your primary care physician and Dr. Byrne.
- **Family/Friend Arrangements:**
 - You must have a friend or family member drive you to the surgery center and drive you home afterwards. This is mandatory. You are not allowed to travel alone or in a cab after your operation.
 - You must also make arrangements to have someone stay with you during the first 24 hours after the operation. After anesthesia, you will likely require assistance with simple activities and wound care. Furthermore, it is important to have someone available in the unlikely event that a complication develops.
 - If necessary, we can help you obtain private nursing care. Please let us know if this will be helpful for you.

Day Of Surgery:

- **Attire:** Please wear loose and comfortable clothing that is easy to take off and put back on. A top with buttons or zipper is recommended. Please do not wear any makeup to surgery.
- **Team:** You will meet the anesthesiologist, nursing staff, as well as Dr. Byrne and any of his additional team members (such as the fellow) on the day of your surgery. Please feel free to ask any remaining questions. Let your Anesthesia team know if you have a known history of nausea following surgery.

At Home After Surgery:

- Patient response can vary after a Laser Resurfacing treatment. Laser Resurfacing is a peel whose precise depth has been determined based on your concerns and the condition of your skin. Typically, the depth of the peel is in the dermis (lower layer of your skin). Erythema (redness) and possibly edema (swelling) are the desired responses within a few minutes after the completion of the procedure. The degree of redness and length of healing time will increase with the depth of your peel. Your physician has customized your treatment for your skin condition, so some areas may have more sensitivity.
 - Redness normally persists for 8 – 12 days depending upon the depth of the peel.
 - Swelling is typically a short-term response. Use of a cold compress or ice packs will help to relieve the swelling. To avoid further swelling, you may choose to sleep in an upright position the first night after the treatment. Sleeping on your back with an elevated pillow will also help prevent the creation of prematurely peeling skin.
 - If an antiviral was prescribed for you, continue to take as directed.
 - Post treatment discomfort may be relieved by over the counter oral pain relievers; i.e. Extra Strength Tylenol or prescribed pain medication if order by the doctor. Oral Benadryl may help itching but can be sedating.
 - A cold compress or an ice pack can be used to provide comfort if the treated area is especially warm. This is typically only needed within the first 12 – 24 hours after the treatment.
 - Oozing or seeping of clear serous fluid (light pink) may occur if the peel is a deep one. This can last for 24-72 hours depending on the treatment depth. This is a process of the skin healing. Your physician has applied an occlusive barrier (i.e. Aquaphor or balm). This barrier may mix with the oozing material and can be dabbed off with clean gauze. Be careful not to rub or scrub the treated area.

- Cleanse the skin two times a day with plain, lukewarm water and a gentle cleanser; i.e. Cetaphil, beginning the morning after the treatment. Use your hands to gently apply the cleanser and water and finish by patting dry with a soft cloth. Be careful not to rub the treated area.
 - After cleansing your face, reapply the occlusive barrier, i.e. Aquaphor, taking care to cover all treated areas. The occlusive barrier is needed to provide a protective barrier that will hold moisture into the skin and provide protection to the skin from pollutants in the air as the skin heals. Reapply the occlusive barrier as needed. Do not allow the treated area to dry out. Healing occurs more rapidly if the skin surface is kept moist and protected. Continue to apply the occlusive barrier until we see you at your first post-procedure visit.
 - Peeling and flaking generally occur within 24 hours post treatment and should be allowed to come off naturally. **DO NOT PICK, RUB, OR FORCE OFF ANY SKIN DURING THE HEALING PROCESS, THIS COULD RESULT IN SCARRING AND INFECTION!**
 - Gently washing the skin more frequently will help to promote the peeling process.
 - Avoid direct sunlight for up to 2 months post treatment.
 - Once skin has healed (no longer wearing the occlusive barrier) you may begin to wear makeup. If you are able to wear makeup, a sunblock (SPF 30 or higher) should be worn on a daily basis to help prevent any hyperpigmentation issues that could be caused by direct or indirect sunlight. Sun block should be used vigilantly for up to 3 months after the procedure.
 - When showering, be sure to avoid getting shampoo directly on the treated area. You may consider taking your shower with the back of your head to the water to avoid directly hitting your face with the full force stream of the water.
 - Avoid strenuous exercise and sweating until after skin has healed.
- **Seek Medical Attention:** Call the office or seek medical attention if you develop fever greater than 101 degrees, skin lesions or focal pain in a localized region such as around the lips, excessive pain that is not well-controlled, or other unusual symptoms.

Follow-Up Care:

- **First Appointment:** You will return one week after surgery for an appointment for nursing wound care.
- **Additional Appointments:** Ideally, we would like to see you about 1-2 months after surgery to examine the healing. After this, the follow-up is quite variable, and depends on how you are doing and feeling. Often, this means visits at about 6 months and 12 months after surgery to follow your healing process. Please call the office at any time if you have any questions or concerns and would like to be seen sooner than your next scheduled visit.