



Patient Instructions for Fractional CO2 Laser Resurfacing

General Information

Fractional laser resurfacing has revolutionized the treatment of fine lines and wrinkles, acne, surgical, and traumatic scars, and facial discoloration. Other benefits of treatment include improvement in the overall texture and tone of the skin. While responses vary from patient to patient, results are frequently achieved in one treatment session. It should be noted that this treatment will likely not improve facial redness or small facial blood vessels, which are best treated with other laser and light-based devices.

All laser procedures carry some degree of risk. The most common and expected side effects of this treatment are temporary redness, swelling, pinpoint bleeding, skin discoloration, and discomfort. Infection, acne flares, prolonged wound healing, redness and discoloration, and scarring are possible but uncommon. **Careful adherence to all postoperative instructions including strict sunscreen use and sun avoidance will minimize complications and maximize your results.** Although fractional CO2 laser resurfacing is very effective in the majority of cases, no guarantees can be made regarding any individual response to treatment.

The procedure you are about to undergo can provide very rewarding results, but not without your complete understanding and full cooperation. The following information will help achieve our mutual goals of safety and satisfaction.

Things to have at home, prior to treatment:

1. White distilled vinegar (large bottle or jug)
2. Q-Tips (not sterile)
3. Clean washcloths
4. Aquaphor Healing Ointment (1.75 oz tube). **Do not use an already open tube or jar!**
5. Moisture lotion
6. Bag of frozen peas or ice bag
7. Sunscreen with SPF 30 or greater containing titanium and/or zinc
8. Large brimmed hat
9. Baby shampoo
10. Gentle cleanser (Neutrogena "Ultra Gentle" or Cetaphil)



3 WEEKS prior to your procedure:

- Avoid facial waxing.
- Avoid chemical peeling or microdermabrasion procedures.
- Avoid tanning and wear a sunblock daily.

2 DAYS prior to your procedure

- Discontinue any prescribed topical medications such as tretinoin, Retin-A, etc.
- Avoid alcohol.
- If you smoke, smoking should be discontinued and hopefully not resumed, but if so, not until healing is complete.

1 DAY Prior to your procedure

- Start taking **VALACYCLOVIR**. Continue as prescribed until medication supply is exhausted (1 WEEK TOTAL).
- Stay hydrated! Drink plenty of water before, during, and after your treatment to aid in the healing process.
- **You must cancel your appointment if you are not feeling well, have a “cold sore” or “fever blister,” or any active infections or open wounds.**

The DAY of your procedure

*****SHOW UP 45 MINUTES PRIOR TO YOUR APPOINTMENT TIME*****

- Shower and shampoo hair the morning of the procedure. Wash face **and ear canals**. Do not apply makeup, hair care products (sprays, gels, mousses, etc), or perfume.
- Wear loose, comfortable clothing (an old but clean button down shirt is perfect). No pullovers. Do not wear jewelry. Bring your hat.
- Do not wear contact lenses. Wear glasses.
- Eat as usual and take your usual daily medications (blood pressure, etc).
- Take your morning dose of **VALCYCLOVIR**
- Bring your prescribed medications to include **Valium, Motrin, and these instructions** with you to the clinic.



Note: DO NOT take Valium until advised to do so by your physician. An informed consent **cannot** be signed if you are on this medication and the procedure will be cancelled. After you have signed the consent form you will be instructed to take your prescribed medications.

What to expect the day of your procedure

- Bring a list of any questions about the procedure you may have.
- You will sign the consent form, and pre-operative photographs will be taken.
- After signing the consent form, you will be instructed to take your prescribed medications—Valium (anti-anxiety) and Motrin (anti-inflammatory, pain reliever).
- Nerve blocks using an injectable numbing agent called lidocaine will be performed. A numbing cream will be applied to the areas of your face that are not affected by the nerve blocks. Numbing medicine will greatly reduce, but not eliminate the discomfort associated with the procedure.
- Just prior to the procedure, your eyes will be covered with metal eye shields to protect your eyes. If you are having your eyelids treated, numbing drops will be applied to your eye, and eye shields will be inserted under your eyelids for protection.
- The procedure takes about 60 minutes, during which time you will hear laser “noises” consisting of crackles and pops, and during which time you will feel as though you are being snapped with a rubber band accompanied by a sensation of warmth.
- There may be pinpoint bleeding, bruising, and crusting depending upon the area and extent of treatment.
- During and immediately after treatment cold air may be applied to your skin for comfort.
- Upon completion of the procedure, an ointment will be applied to the treated areas. Leave this ointment on for 4-8 hours, then gently remove and begin vinegar soaks.

Post-operative Care Instructions

- General Principles:
 1. Wash your hands thoroughly prior to contact with your face
 2. Do not pick or scrub your face
 3. When showering, use tepid water, gentle soap (Cetaphil or Neutrogena “Ultra Gentle”), and baby shampoo. Avoid direct spray on treated areas.
 4. Avoid strenuous exercise, swimming, or hot tubs until your skin is healed
 5. Avoid direct contact with animals and animal waste products
 6. You may take Motrin every 8 hours for pain, Claritin daily for itch
 7. **Vinegar Soak Technique** (antiseptic, helps prevent infection):
 - Mix **1 teaspoon** white vinegar in **1 cup** of cool tap water.



- Gently remove as much Aquaphor layer as possible without disturbing the skin.
 - Lie down with a towel under your head. Gently apply a clean washcloth soaked in the vinegar solution to the treated areas for 10-15 minutes.
 - Pat dry & apply an ample coat of **Aquaphor** ointment with Q-tips or gauze.
 - Repeat this rinse/Aquaphor reapplication cycle **4 times daily** or more often for comfort. If the vinegar soaks stings or burns, dilute with more water. **Prepare a new vinegar solution with each soak to prevent contamination.**
- **Days 1-5 Following Procedure:**
 1. Morning:
 - Take Valacyclovir, other medications as prescribed
 - Perform vinegar soak
 - Gently apply Aquaphor ointment with Q-tips or gauze
 2. Mid-day:
 - Take Valacyclovir
 - Perform vinegar soak
 - Gently apply Aquaphor ointment with Q-tips or gauze
 3. Late-afternoon:
 - Perform vinegar soak
 - Gently apply Aquaphor ointment with Q-tips or gauze
 4. Before bedtime:
 - Take Valacyclovir
 - Perform vinegar soak
 - Gently apply Aquaphor ointment with Q-tips or gauze
- **Days 5-14 Following Procedure:**
 1. Transition from vinegar soaks to Cetaphil cleanser 1-2 times daily, and from Aquaphor to a gentle moisturizer (Moisturel). Some areas will heal faster than others, so you may need to continue soaking and ointment in areas that continue to appear raw or crusty.
 2. Apply sunscreen daily.
 3. Be sure to complete your course of Valacyclovir.
 4. Follow up with your physician as scheduled.
- **Days 14 and Beyond:**



1. **SUNSCREEN.** The American Academy of Dermatology recommends a broad-spectrum (protects against UVA and UVB rays) sunscreen with SPF 30 or greater, applied generously to all exposed skin.
2. **Wears sun protective clothing** (long-sleeved shirts, wide-brimmed hats, and sunglasses) where possible.
3. **Seek shade when appropriate**, remembering that the sun's rays are strongest between 10am and 2pm.
4. **Use extra caution near water, snow, and sand** as they reflect the damaging rays of the sun.
5. **Get vitamin D safely** through a healthy diet.
6. **Avoid tanning beds.** Ultraviolet light from the sun and tanning beds can cause skin cancer and wrinkling.
7. If you use Retin-A (tretinoin) or glycolic acid products, you may resume treatment.
8. If darkening of treated areas occurs after treatment, your physician may advise you to start hydroquinone (a bleaching cream). Decreased pigment should be anticipated 1-3 months after using this cream.

Specific Concerns Post-Operatively

1. **Pain:** Pain will be fairly intense immediately after the procedure, but should subside over the next several hours. You may elect to take 1-2 Motrin tablets 4 hours after the procedure, and then every 8 hours as needed. Pain should gradually subside within 3 days.
2. **Swelling:** You will notice most of the swelling (particularly eyelids) on the first and second mornings after treatment. The swelling usually lasts 2-7 days. To minimize swelling, apply cold-water compresses and sleep with your head elevated.
3. **Redness:** You can expect a sunburn-like reaction with redness after treatment. Most redness resolves during the first several weeks, but can persist longer in some patients.
4. **Crusting & peeling:** On about the third day, you may notice some fine peeling, flaking, or brown "coffee ground" crusting of the skin. Occasionally a "sandpaper" texture develops. Do not pick or scratch at any of the treated areas as this can lead to scarring. As your skin peels over the next 3-10 days, a new healthy layer of skin will be revealed.
5. **Raw skin:** If you develop raw skin after treatment, keep those areas moist with Aquaphor Healing Ointment until the area heals. Do not pick. Discontinue Aquaphor after 5 days (applying Aquaphor for more than 5 days can plug up your pores and



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7. lead to an acne-like breakout), switching to a gentle moisturizer like Biotherapy Moisturizer.
6. **Itching:** As healing takes place, it is not uncommon to experience itching. Cool water compresses and an oral antihistamine such as Claritin or Benadryl may provide relief.
7. **Facial discoloration** may occur after treatment and is expected in darker skinned patients. Bleaching creams and sunscreens are mandatory once healing occurs to help fade this discoloration.

Not all areas are treated with the same intensity, and therefore may appear to have been missed or skipped. This is intentional. Do not be concerned. Depending upon the intensity of treatment and what was being targeted (brown spots, fine lines/wrinkles, deep lines/wrinkles), some areas may exhibit a patterned or checkerboard-like appearance which will fade over the next several weeks. Despite differences in treatment patterns seen on the skin, be assured that your overall treatment is uniform throughout.

8. **Notify your physician if:**
 - a. **Pain increases rather than decreases in the days after the procedure.**
 - b. **You experience itching to the point of distraction.**
 - c. **Fever, cold sores, or pustules form (signs of infection).**

Post-Operative Visits

1. You must be seen in the office 1-3 days after the procedure, and again 5-7 days later. Your physician will specify which days you will be seen at the time of your procedure.
2. If at any time you suspect an infection or have any other concern, you should call our office (**310-847-9693**) immediately.

Expectations

1. It is expected that the worst appearing day will be 48 hours postoperatively following which you will see gradual improvement.
2. Improvement in color and texture is generally seen at 10-14 days.
3. Improvement in wrinkles, scars, and skin tightening may take 3 months or longer.



4. Although no assurances or guarantees can be made regarding any individual response to any one treatment, continued improvement after laser resurfacing can be seen for up to a year after the procedure.