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## **ABLATIVE FRACTIONAL CO2 LASER RESURFACING: PATIENT INFORMATION AND INSTRUCTIONS**

Fractional laser resurfacing is one of the newest laser technologies and is revolutionizing the treatment of fine lines and wrinkles, acne, surgical, and traumatic scars, and facial discoloration. It also improves the overall texture and tone of the skin. However, this device will not likely improve facial redness or small facial blood vessels which can be treated with other laser and light-based devices. CO2 Fraxel can also be used off the face on the neck, chest, and hands. Lasers employ specific wavelengths with light to target certain elements on the skin. The ablative fractional technology involves a pixel-like dot matrix approach to treatment. This method leaves intervening areas of skin that have not been treated and allows for more rapid healing. Although the ideal candidates are patients who have light colored skin, this device can be used on most skin color types.

Fractional ablative resurfacing is performed using topical, oral, and/or injection local anesthesia. Treatment of the face takes about 60 minutes. While responses vary from patient to patient and from treatment to treatment, results are frequently achieved in one treatment session. Generally, improvement in texture and color is noted within the first few weeks, but improvement in reduction of wrinkles, scars, and skin tightening may not be evident for three months or longer. In some cases, a second treatment may be performed three to six months later to obtain additional improvement.

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 the risk for complications. Although ablative fractional CO2 laser resurfacing is effective in most cases, no guarantees can be made regarding any individual response to treatment. Some skin conditions may not improve or respond as expected despite our best efforts.

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 toward achieving our mutual goals of safety and satisfaction.

### **PREPARING FOR YOUR SURGERY**

- This procedure involves 5-7 days or longer of “downtime”. Do not plan on returning to work, being in public, or exercising for approximately one week following your procedure. Please prepare family members that you will be very red and swollen for several days after treatment. Most patients heal in 5-10 days depending upon the area and extent of treatment following which they may resume their normal daily activities, including wearing makeup.
- You will be given prescriptions that will need to be filled prior to your procedure and brought to the office the day of your procedure. They may include an antiviral agent, antibiotic, antianxiety, antihistamine, and pain medication.
- Please advise us if you need to take prophylactic antibiotics before surgery as recommended for some patients who have artificial hips, knees, heart valves, or other similar devices. You should bring that medication with you on the day of your surgery.
- You must have a driver to take you home as your preoperative medications make it unsafe for you to drive yourself.

## **YOU ARE NOT A CANDIDATE FOR THIS PROCEDURE IF:**

- You are on Coumadin.
- You have an active facial infection or skin infection anywhere on your body.
- You are pregnant or nursing.
- You are currently taking isotretinoin or have taken isotretinoin within the previous 12 months as it may adversely affect wound healing.

## **PRECAUTIONS**

- Tanning, whether it is with natural sunlight or indoor light is not recommended at any time, but especially six weeks before treatment and for at least six weeks after your treatment.
- Sunscreens/sunblocks with an SPF of 30 or greater containing titanium and/or zinc which block both UVA and UVB light should be worn prior to and after your treatment to maximize your results and minimize complications, such as skin darkening. If your skin has a tendency to turn dark in areas of minor cuts, abrasions or scars, please talk to your doctor about starting a bleaching regimen before your treatments begin to minimize the risk of skin darkening with the laser treatment. Following your laser treatment and once the skin has healed; you must restart the bleaching regimen along with sunblock for at least six weeks.
- Patients who are susceptible to developing cold sores around the mouth may develop cold sores following laser treatment. These individuals are required to take an antiviral medication before treatment. If you have a history of cold sores, please let your physician know prior to your treatment so that an antiviral medication can be prescribed. **(ALSO, PLEASE RESCHEDULE YOUR APPOINTMENT IF YOU HAVE A VISIBLE COLD SORE OR FACIAL INFECTION AS YOU CANNOT BE TREATED UNTIL THE AREA IS COMPLETELY HEALED.)**

## **REQUIRED POST-OPERATIVE SUPPLIES**

- A large tube of Aquaphor Healing Ointment.
- Cetaphil gentle skin cleanser
- Cetaphil moisturizer or other moisturizer you have previously used.
- Sunscreen/sunblock with an SPF of 30 or greater containing titanium and/or zinc.
- Large plastic bowl.
- Ice water or bottles of cold water.
- Clean washcloths or soft (white) disposable paper towels.

## **PRE-OPERATIVE INSTRUCTIONS**

### **Three weeks prior to your procedure:**

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

### **Ten days prior to your procedure:**

- You should have prepaid by this date to confirm your procedure.
- Avoid all aspirin and aspirin-like products, arthritis pain medication (Motrin, Advil, Aleve, Nuprin, etc.).
- Avoid all herbal medications, garlic, fish oil, vitamin-E, and any other products which may promote bleeding and bruising.
- Tylenol does not promote bleeding or bruising and you may take it.
- Avoid contact with anyone who has a history of cold sores.

**Two days prior to your procedure:**

- Discontinue any prescribed topical medications such as tretinoin, Retin-A, Renova, Bleach-Eze, etc.
- Avoid alcohol.
- Smoking should be discontinued and hopefully not resumed, but if so, not until healing is complete.

**One day before treatment:**

- Discontinue all facial creams, moisturizers, and makeup.
- Stay hydrated! Drink plenty of water before, during, and after your treatment to aid in the healing process.
- Begin taking any antiviral medication which has been prescribed.
- **YOU MUST CANCEL YOUR APPOINTMENT IF YOU ARE NOT FEELING WELL, HAVE AN ACTIVE INFECTION OF ANY KIND, COLD SORE, OR ANY OPEN SKIN WOUNDS OR INFECTIONS**

**Preparation for day of procedure:**

- Eat as usual and take your usual daily medications.
- **ARRIVE AT THE OFFICE AT LEAST ONE AND ONE HALF HOURS (1½) PRIOR TO YOUR TREATMENT.**
- Bring a list of your current medications as well as medication allergies.
- Bring the medications which we have prescribed for you for this procedure including your large tube of Aquaphor Healing Ointment.
- Bring in your consent form and these instructions.
- Do not wear contact lenses or earrings.
- Leave all of your valuables at home including watches, necklaces, and bracelets.
- Come to the office with your hair freshly shampooed and pulled back away from your face.
- No hair care products including sprays, gels, mousses, etc.
- No perfume.
- Bring or wear an old but clean button down shirt which may become soiled and wear comfortable clothing. No pullovers!
- If you are a male, come freshly shaven.
- Come in with a clean face with no makeup, creams, lotions, moisturizer, etc.
- You may want to bring a brimmed hat, sunglasses, and a scarf to wear after your procedure.

**WHAT TO EXPECT THE DAY OF YOUR PROCEDURE:**

- Bring a list of any questions you may have.
- Be prepared to sign the consent form and consent to pre and post-operative photographs.
- One hour preoperatively, your face will be cleansed and a topical anesthetic ointment applied. Then you will be given the medications which you have brought in which may include an antiviral, antibiotic, antianxiety, antihistamine, and pain medication.
- Just prior to the procedure, your eyes will/may 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 water compresses and/or cold air may be applied to your skin for comfort.

## **WHAT TO EXPECT AFTER THE PROCEDURE**

- You may expect some discomfort which usually responds to Tylenol or a stronger pain medication which may be prescribed. This discomfort usually lasts only several hours but could last a day or longer.
- Immediately postoperatively, we will apply cold-water compresses for about 15 minutes and Aquaphor Healing Ointment. This is a process which you will repeat 3-4 times daily until you are healed.
- You can expect the treated areas to be very red and raw for several days and then turn pink.
- It is expected that you will look the worst at 48 hours post-operatively following which your appearance will gradually improve.
- You are encouraged to drink a lot of fluids after treatment and to take your usual medications as well as those which we have given you.
- Diet: If the skin around the mouth and lip areas has been treated, you should avoid foods that are hot in temperature, spicy, or salty for the first day or so and consume soft foods.
- Sleep: Try to keep your head elevated on pillows at night for the first several nights.

## **GENERAL POST-OPERATIVE WOUND CARE INSTRUCTIONS**

- The basic principle behind your wound care is to avoid crusting (scabbing) and to keep the skin as moist as possible.
- You are to apply cold water compresses for 10-15 minutes every 3-4 hours while awake followed by the application of Aquaphor Healing Ointment until all crusting has come off, which is usually about 5 to 7 days.
- You can either use refrigerated bottled cold water or ice water. A fresh clean cloth or white paper towel should be used for each session.
- To reduce your risk of infection, it is important to perform thorough hand washing prior to contact with facial skin.
- Do not pick or scrub your face.
- After 24 hours, you may use Cetaphil gentle skin cleanser or other soap-free cleansing product as necessary.
- When showering, use tepid water and avoid having shampoo touch your face.

## **GENERAL POST-OPERATIVE PRECAUTIONS**

- **Activity:** Avoid heavy lifting or aerobic exercise. Do not visit a gym until you are healed.
- Avoid all contact with anyone with a cold sore or skin infection and do not share your bath towels with any family members.
- Do not smoke until you are healed and the redness has subsided.
- Avoid swimming, hot tubs, and strenuous exercise until your doctor approves.
- Avoid direct contact with animals (particularly dogs, cats) and animal waste products.
- When the crusting has come off, you may apply Cetaphil moisturizing cream or the moisturizer of your choice, sunblock, and makeup to hide any redness.
- Avoid any previously prescribed topical medications for at least four weeks unless otherwise advised.

## **SPECIFIC CONCERNS POST-OPERATIVELY**

- **Swelling:** You will notice most of the swelling on the first and second mornings after treatment, particularly of the eyelids. The swelling usually lasts 2-7 days. To minimize swelling, apply cold-water compresses as instructed and sleep elevated on as many pillows as you can tolerate.

- **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.
- **Not all areas are treated with the same intensity and therefore may appear to have been missed or skipped, but in all likelihood this is intentional. Do not be concerned. Depending upon the intensity of treatment, some areas may exhibit a patterned or checkerboard-like appearance which will fade over the next several weeks. Despite differences in treatment pattern seen on the skin, be assured that your overall treatment is uniform throughout.**
- **Dry skin and peeling:** On about the third day, you may notice some fine peeling, flaking, or crusting of the skin, which is referred to as “bronzing”. You may notice a “sandpaper” texture develop. 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 layer of skin will be revealed.
- **Raw skin:** If you develop areas of raw skin after treatment, keep them moist with Aquaphor Healing Ointment until the area heals. You do not need to apply bandaids, but keep the areas moist and do not pick at them. Do not use Aquaphor for more than five days as it may plug up your pores and lead to an acne-like breakout. You may substitute Cetaphil moisturizer or the moisturizer of your choice at this time.
- **Acneiform eruptions:** Breakouts from acne have been reported to occur after laser resurfacing treatment. If this occurs, topical and oral antibiotics may be prescribed.
- **Itching:** As healing takes place, it is not uncommon to experience itching. Cool water compresses and an oral antihistamine such as Benadryl, Claritin, or similar product may provide relief.
- **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**
- Notify your physician if any of the above noted side effects seem to be prolonged or if you have unusual pain or discomfort.

### **POST-OPERATIVE VISITS**

- You must be seen in the office 1-3 days after the procedure and again 5-7 days later.
- If at any time you suspect an infection or have any other concern, you should call our office immediately.

### **EXPECTATIONS**

- It is expected that the worst appearing day will be 48 hours post-operatively following which you will see gradual improvement.
- Improvement in color and texture is generally seen at 10-14 days.
- Improvement in wrinkles, scars, and skin tightening may take three months or longer.
- **Second/repeat procedures are occasionally undertaken to provide additional improvement for which there is an additional charge.**
- No assurances or guarantees can be made regarding any individual response to any one treatment.

### **COST AND PAYMENT POLICY:**

Since laser resurfacing is considered cosmetic, you are responsible for the cost of treatment. Full payment is due ten days prior to your appointment. Unfortunately, credit cannot be extended. If you have questions, please make sure they are answered to your satisfaction.

We are pleased that you have chosen New England Dermatology & Laser Center for your skin care and we appreciate your confidence in us. If you have questions or concerns regarding your treatment, please call us at (413)-733-9600.