

# CO2 Laser Resurfacing

## Patient Information

### Background

CO2 Laser resurfacing is an aesthetic procedure that uses a carbon dioxide (CO2) laser to improve the appearance of the skin. The laser targets both layers of the skin, removing damaged tissue through a process called ablation. This resurfaces and stimulates collagen production and encourages the growth of new, healthier skin. CO2 Laser resurfacing can help treat a variety of skin issues including:

- Age Spots & Pigmentation
- Sun Damage
- Uneven Skin Tone
- 'Dull' Complexion
- Skin Texture Concerns
- Fine & Deeper Wrinkles
- Skin Lesions

### How does CO2 Laser resurfacing work?

The laser creates small, controlled micro burns on the skin to remove both the epidermis and a variable amount of dermis. This triggers the body's natural healing process, stimulating the growth of new, healthy skin and boosting collagen production. Resurfacing the epidermis improves skin texture, fine lines, pigmentation and areas of skin damage, as well as giving you a refreshed skin 'glow' that is the marker of healthy refreshed skin. At the same time the energy delivered to the dermis stimulates collagen renewal to continue the tightening process and improve deeper scars or wrinkles. With a deeper LASER treatment, you will see your skin continue to improve for up to 6 months post treatment. We can tailor your CO2 LASER therapy to your skin

needs addressing multiple concerns such as: Age spots and pigmentation, Sun damage, uneven skin tone, 'Dull' complexion, Skin texture concerns, fine as well as deeper wrinkles, Skin lesions.

### Is the procedure right for me?

A detailed consultation with your Consultant Plastic Surgeon is essential prior to undergoing any surgical procedure. During the consultation, your Surgeon will discuss your areas of concern, desired improvements, options available (including no treatment at all) and expected outcomes. Your surgeon will examine your face and neck and may take some photographs for your medical records. You will be given a 'cooling-off' period of at least 2 weeks between initial consultation and the date of your treatment to ensure you have ample time to reflect on all aspects of the procedure before proceeding (although please bear in mind the waiting lists for our Surgeons mean this period is invariably significantly longer).

### How is the procedure carried out?

Should CO2 laser resurfacing be agreed upon as the most suitable treatment, the procedure will be carried out by your surgeon in our state-of-the-art operating theatre. Depending on the depth of treatment CO2 laser can be performed using a

topical anaesthetic cream, local anaesthetic or general anaesthetic to minimise discomfort. Following a thorough cleanse, your surgeon will use a handheld device to deliver a focused beam of carbon dioxide laser energy to penetrate the skin. This creates small, controlled micro burns on the skin to remove both the epidermis and upper dermis. The treatment can take around 30 - 60 minutes to perform depending on the treatment area.

### What to expect after treatment?

The CO2 laser resurfacing treatment is performed as a day case under general anaesthesia. Our highly experienced medical team will be on hand during your stay to care for your needs. The treatment usually takes around an hour to complete. If your surgery is performed as a day case and you go home on the same day. Following treatment, the area will be hot, resembling the feeling of sunburn. Skin will appear red and hot to the touch immediately after treatment, with symptoms comparable to mild sunburn for 3 - 4 days. You will experience mild itching and visible crusting of the skin for around 10 days. The treated area will feel tight and sore. Simple painkillers should be enough to keep you comfortable.

### Aftercare and Recovery

To ensure your safety and optimal results following treatment, it is imperative that you follow the guidance explained by your surgeon and recovery. Thousands of tiny holes have been created in your skin. As a result, you are more susceptible to skin reactions. Avoid touching the treated area as much as possible. If you do need to touch it, make sure hands are freshly washed. As part of your infection prevention, you will be supplied with an aftercare pack consisting of gentle skincare specific products and a strict infection prevention cleansing routine to be followed during your recovery. This routine will commence the evening of your treatment and will need to be repeated 4 times a day (breakfast, lunch, dinner and supper times) for 3 additional days. The use of topical antibiotics (and oral if prescribed) will help reduce (but not eliminate) the risk of infection. Continue your antibiotics as prescribed. You will be required to use a clean towel on your pillow for the first 3 nights to reduce the risk of infection, the towel can be wrapped under the chin if necessary to absorb any leakage.

### What are the expected results?

Following your treatment, you should expect to see improved skin texture, tone and firmness, and visibly reduced wrinkles, pore size and acne scarring.

**If you experience any problems, concerns, or display any symptoms such as increased pain, fever, signs of infection or pronounced bleeding following treatment, please call our direct patient line immediately for assistance on 07908 891059.**



# CO2 Laser Resurfacing

## Patient Pre & Post Procedure Care Guide

### Pre-Procedure Preparations

Prior to treatment, patients are advised of the following:

#### 1 Month Prior To Treatment:

- It is a pre-condition that there should be no active suntan or fake tan in the area to be treated. Use of sunbeds or prolonged exposure to sunlight is not allowed in the month prior to treatment and SPF 50 must be used on the area between treatments. Sun tans must be left to fade completely before treatment can start. Fake tans must also be faded fully before treatment can commence.

#### A Minimum Of 2 Weeks Prior To Treatment:

- Prior to undergoing the procedure, you will need to discontinue the use of Retin-A or any retinol-type products. Wait at least two weeks after Injectable treatments such as Botox or Fillers before having fractional CO2 laser treatment.

#### A Minimum Of 1 Week Prior To Treatment:

- Avoid the use of exfoliating products such as alpha-hydroxy acid and salicylic acid products for the week before your treatment.

#### On the Day of Treatment:

- Please shower, shave (men) and wash your hair on the morning of the procedure
- Please wear comfortable clothing
- Please do not wear make-up or jewellery

### Post-Procedure Instructions

Following treatment, patients are advised to:

#### Infection Prevention:

- Thousands of tiny holes have been created in your skin. As a result, you are more susceptible to skin reactions. Avoid touching the treated area as much as possible. If you do need to touch it, make sure hands are freshly washed.

#### 0 - 3 Days After Treatment:

- Use a clean towel on your pillow for the first 3 nights to reduce the risk of infection, the towel can be wrapped under the chin if necessary to absorb any leakage.

- The use of topical antibiotics (and oral if prescribed) will help reduce (but not eliminate) the risk of infection. Continue your antibiotics as prescribed.

- Start your infection prevention cleansing routine the evening of your treatment and repeat 4 times a day (breakfast, lunch, dinner and supper times) for 3 additional days:

#### Infection Prevention Cleansing Routine:

1. Wash the treated area very gently using Cetaphil Cleanser and tepid water (avoid hot water). Pat dry very gently with the sterile gauze provided.
2. Finally apply a generous layer of Petroleum Jelly.
3. Apply a thin layer of Sunscreen (daylight hours) if going outside.

#### 4 Days - 1 Month After Treatment:

- You can cease the full routine above from day 4 and continue with the following cleansing routine:

1. Cleanser
2. Moisturiser - Apply a generous layer of moisturiser to keep the skin from getting dry, thus avoiding pigmentation - for 1 month.
3. Sunscreen - Apply EVERY day.

If you experience any problems, concerns, or display any symptoms such as increased pain, fever, signs of infection or pronounced bleeding following treatment, please call our direct patient line immediately for assistance on 07908 891059.

# CO2 Laser Resurfacing

## Risks & Complications

### **Skin Itching:**

- You may experience itching as the skin begins to heal. This is a normal part of the healing process for some people. Take antihistamines if needed

### **Discomfort:**

- You will experience a sensation like 'sun burn' which will begin during the procedure. This will start to subside after about 2 - 3 hours. There will be no other discomfort associated with the procedure after this time. Take your preferred painkillers half an hour before the treatment, and again when you get home if needed. N.B. DO NOT EXCEED THE RECOMMENDED DAILY DOSE

### **Swelling & Skin Tightness:**

- Swelling of the treated area will be seen immediately at the end of the procedure. This is normal and will get progressively worse over the next few days. With swelling will come tightness as the skin stretches.
- Swelling may be quite severe in some cases and will be worse each morning when you wake. Swelling and tightness will start to subside from day four.
- It is advisable to sleep on raised pillows for the first four days following treatment.

### **Wound Healing:**

- You may have some 'pinpoint' bleeding which can persist for up to 24 hours (the amount and duration of bleeding varies from person to person).
- There may also be weeping or oozing of a 'straw-coloured' fluid (serous fluid) which helps form a tiny crust over each column of ablated tissue.
- These tiny crusts will make the skin feel like fine sandpaper.
- Do not deliberately scrub, pick, or rub off any tiny scabs, allow them to come off in their own time to avoid the risk of scarring.
- You will leave the clinic with petroleum jelly covering the treated area. This forms a barrier to seal the skin and prevent moisture loss/dehydration which can lead to pigmentation.
- A thick layer of petroleum jelly should be maintained (morning and night) until all tiny crusts have fallen off (usually by day 5 - 9). Be sure to thoroughly wash your hands before each application.
- Try to drink 2 litres of water a day during the first week. The more fluids you drink, the better your skin will heal.

### **Redness and Pinkness of the Skin:**

- Redness of the treated area will improve as the skin heals and gradually turn pink. This pinkness may persist for 2 weeks to 2 months or possibly longer.
- Mineral makeup can be applied to conceal the pinkness when the skin is fully healed. These products contain healing properties and should be used as an extension to your daily skincare routine

### **Herpes Simplex (Fever Blisters / Cold Sores):**

- The risk of a herpetic (cold sore) outbreak is reduced with a course of prophylactic (preventative) treatment of oral antiviral medication (Aciclovir). This risk, however, cannot be eliminated.
- Continue taking Aciclovir as prescribed and complete the course.

### **Hyperpigmentation & Hypopigmentation:**

- Keep the skin well moisturised and hydrated - use white petroleum jelly or moisturiser liberally for 1 month after the treatment
- Use SPF 50 starting the day of the procedure. Remember to re-apply after each of the 'cleansing sessions' if going outside.
- Avoid or limit sun exposure
- Hypopigmentation (lightening of the skin) can occur because of laser-induced injury to the melanocytes (pigment containing cells in the skin) and can in some instances be permanent.

### **Sun Exposure:**

- Your skin is extremely vulnerable to the sun after having laser treatment. Protecting your skin and limiting sun exposure ensures the best cosmetic results.
- Start using your sunscreen immediately. This is very important to prevent hyperpigmentation.
- Avoid direct sunlight during the first month after the procedure. The skin is very sensitive during this early healing phase.
- No unprotected sunbathing is permitted for 6 months. To do so would encourage skin pigment changes necessitating further treatment.

### **Follow Up:**

- Please call immediately if you experience any of the following: increasing pain, signs of infection or herpetic (cold sores) outbreak, or if you have any concerns or need reassurance.
- Avoid waxing for 2 weeks. Avoid Retin-A, glycolic or other similar products for 4 weeks.
- A follow up appointment should be scheduled at 2 weeks. You should also schedule an appointment with one of the skin specialists to discuss maintaining and enhancing your cosmetic results. The use of the correct 'medical grade' products and treatments is crucial.

**If you experience any problems, concerns, or display any symptoms such as increased pain, fever, signs of infection or pronounced bleeding following treatment, please call our direct patient line immediately for assistance on 07908 891059.**

# CO<sub>2</sub> Laser Resurfacing

Patient Pre & Post Procedure Care Guide

## Infection Prevention Cleansing Routine - How to Cleanse Following Your Treatment

The goal of CO<sub>2</sub> laser skin resurfacing is to improve the appearance of lines and wrinkles, scars of various origin, uneven pigmentation, dilated pores, skin laxity/creping and poor skin texture. Treatments carried out with the CO<sub>2</sub> laser create a 'controlled burn' of the treated tissue which results in a hundred of columns of 'ablated skin' which makes daily care of the treated area essential. The following aftercare instructions MUST be followed to minimise any undesirable side effects, and to ensure the best possible outcome.

### Infection Prevention:

- Thousands of tiny holes have been created in your skin. As a result, you are more susceptible to skin reactions.
- Avoid touching the treated area as much as possible. If you do need to touch it, make sure **Hands Are Freshly Washed**.
- Use a **Clean Towel** on your pillow for the first 3 nights to reduce the risk of infection.
- The use of topical antibiotics (And Oral If Prescribed) will help **Reduce** (But Not Eliminate) the risk of infection. Continue your antibiotics as prescribed.
- Start your infection prevention cleansing routine the evening of your treatment and repeat 4 times a day (breakfast, lunch, dinner and supper times) for 3 additional days.

### Infection Prevention Cleansing Routine:

1. Wash the treated area Very Gently using **Cetaphil Cleanser** and **Tepid** water (avoid hot water). Pat dry very gently with a clean towel (Use A **Clean Gauze Swab** Each Time).
2. Finally apply a generous layer of **Petroleum Jelly**.
3. Apply a thin layer of Sunscreen (Daylight Hours Only) if going outside.

*You can cease the full routine above from Day 4, and continue with:*

1. Cleanser
2. Moisturiser - Apply a generous layer of moisturiser to keep the skin from getting dry - **For 1 Month**.
3. Sunscreen - Apply Every day come rain, snow or shine when venturing outside.

If you experience any problems, concerns, or display any symptoms such as increased pain, fever, signs of infection or pronounced bleeding following treatment, please call our direct patient line immediately for assistance on 07908 891059.