

ABLATIVE FRACTIONATED CO₂ LASER
RESURFACING



This leaflet tells you about the procedure known as **ablative fractional CO₂ laser**. It explains how it works, what the cosmetic effects are and the possible risks associated with this treatment.

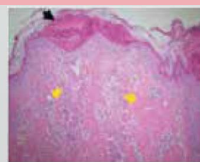
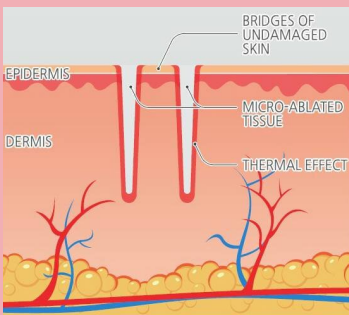
WHAT IS FRACTIONAL CO₂ LASER?

Fractional CO₂ laser is a minimally-invasive topical laser cosmetic procedure, which involves delivering fractions of laser energy to the skin of the face. This stimulates skin regeneration and activates the mechanisms for collagen production and skin tightening. The treatment is performed under **local anaesthesia** in an outpatient setting.

HOW DOES IT WORK?

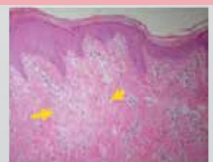
The CO₂ laser beam vaporises water molecules in the skin. This heats up the skin and so that the top-most layer is peeled off. As a result, production of new skin is stimulated and the skin defects caused by the laser are healed over, creating a smoother skin surface.

“Fractional” CO₂ laser means that only part of the treated skin area is hit by the laser beam, while islands of skin between are left untouched. For this reason, fractional CO₂ laser treatment is less sore and will heal quicker than “traditional” CO₂ laser treatment.



2 DAYS POST

Skin is healing creating new collagen during wound healing process.



POST 14 DAYS

Outer layer of skin is completely healed and collagen remodeling continues for up to nine months.









WHAT ARE THE COSMETIC EFFECTS?

Fractional CO₂ laser can be used to treat a variety of skin conditions, such as reducing unevenness of the skin caused by scars or to improve the textural appearance of the skin by reducing fine lines. It also helps to stimulate skin tightening, and can be used along with other treatments in combination to maximise this.

HOW LONG DOES THE TREATMENT TAKE?

A single treatment to the face usually takes approximately 30 minutes. Our patients are often invited to clinic 15 minutes prior to their allocated appointment time in order to apply topical anaesthetic cream.

ADVANTAGES

-  Considered the 'gold standard' laser resurfacing treatment
-  Outpatient setting
-  Long-lasting results with 1-3 sessions
-  Less downtime compared to traditional CO₂ laser
-  Safe and established treatment
-  Effective for acne scars and fine lines reduction
-  Performed under topical anaesthesia with minimal discomfort
-  Can be combined with other laser (e.g. Endolift) and injectable (e.g. dermal fillers and Profhilo) treatments

HOW LONG DO THE RESULTS LAST?

Both the cosmetic effects and length of results vary between individuals, and this partly influenced by the baseline status of your skin. The greatest benefit of this procedure is that the results are long-lasting. Once healing is complete the new skin you are left with will appear rejuvenated for a significantly long period of time, providing that you take care of the results. The procedure does not have to be regularly repeated like other cosmetic treatments.

IS CO₂ LASER PAINFUL?

Each individual experiences discomfort to varying degrees. We will determine how to minimise your discomfort during the procedure. Typically, a topical anaesthetic cream is applied prior to the procedure, which significantly reduces discomfort. An air cooling device can also be used to improve comfort.

WHAT PREPARATION DO I NEED?

On the day of treatment, avoid make-up or other creams if possible, and remove any large items of jewellery. Avoid other facial laser treatments for at least 4 weeks prior. Avoid peel-based creams (e.g. retinol) for 1 week prior.

WHAT IS THE RECOVERY PERIOD?

The recovery for most patients after CO₂ laser typically ranges from one to two weeks*

PHASE ONE | Immediately, the skin will feel firm, red and partly swollen (typically settles within the first 2-3 days).

PHASE TWO | Over 3-4 days, redness fades and the skin begins to feel tight and dry, with early peeling.

PHASE THREE | After 4-8 days, redness gradually diminishes with some ongoing sensitivity. Further peeling develops during this stage and you can resume most activities.

Complete recovery is expected within 7-10 days after complete peeling – return to normal skincare routine and make up is permitted at this stage.

*These time periods are representative for an average patient and influenced by individual factors, and you may find that you recover quicker or longer than the time periods stated above. For that reason, it is important to plan your treatment around other major personal events so that you can give yourself a comfortable amount of time for healing.

WHAT IS MY AFTERCARE?

You will be able to eat and drink, and can go home straight away. You will be given aftercare instructions along with an skin recovery pack containing all the necessary recovery face wash and creams. Occasionally, patients receiving more extensive ablative laser treatment may be recommended a short course of antibiotics for the first week after – this will be discussed and arranged for you, if appropriate.

Follow up appointments can be arranged for you at the clinic to review the results and discuss onward treatment, if appropriate. You will be provided with contact details should you encounter any concerns or require a review earlier than the above date.

WHAT ARE THE RISKS?

Fractional CO₂ laser is a well-established, safe procedure with a low risk profile when performed in experienced hands. A detailed list of possible risks and side effects is available in your consent form. Hyper or hypo-pigmentation, infection and scarring are uncommon risks that may occur, but these can be mitigated significantly by selecting the correct patients for treatment and maintaining a good aftercare protocol.

CAN CO₂ LASER BE REPEATED IN FUTURE?

Yes. In some patients, a course of 2-3 sessions may be recommended depending on the desired improvement and baseline quality of your skin. Otherwise, you do not need to routinely repeat the treatment until you notice natural deterioration of the skin in future. Many of our patients seek to renew their results on an annual basis.

