

Fractional Non-Ablative Laser Resurfacing

What is fractional non-ablative laser resurfacing?

Fractional non-ablative laser resurfacing is a cosmetic treatment that uses focused beams of light energy to create tiny columns of controlled thermal injury in the skin. Unlike ablative lasers, non-ablative devices do not remove or ‘ablate’ the top layer of the skin. Instead, they heat targeted areas beneath the surface, stimulating collagen production and natural skin repair while leaving surrounding tissue intact. This allows faster healing and minimal downtime compared to traditional ablative resurfacing.

Why might I choose to have this procedure?

Fractional non-ablative laser treatment may be considered if you would like to improve skin tone and texture, reduce fine lines, diminish pigmentation, or soften scars with a shorter recovery time. It can be a good option for people who want visible skin rejuvenation but cannot take extended time off for healing. It is also a helpful and safer laser modality to use when you have a darker skin type as the risk of dyspigmentation (lightening or darkening of the skin) is reduced compared with ablative lasers.

What does the procedure involve?

Before treatment, it is always recommended to have a consultation to ascertain your medical history, to examine your skin to determine your skin type and discuss your skin goals, including how and whether they can be achieved. Potential benefits, risks, side effects and the alternative options should always be discussed by your laser practitioner. You may be advised to avoid sun exposure, fake tan, and certain skincare products (such as retinoids or exfoliating acids) in the weeks leading up to treatment. During the procedure, protective eyewear will be provided and a topical anaesthetic cream may be applied prior to the treatment to improve comfort. The laser handpiece is then passed across the treatment area, delivering a grid of microscopic laser beams. You may feel heat or a prickling sensation. Sessions usually take 20–45 minutes, depending on the size of the area.

What are the benefits of the procedure?

The treatment stimulates the body’s own healing processes, promoting new collagen formation. Benefits include smoother skin texture, reduction of fine lines, improved pigmentation, even skin tone and softening of scars such as those caused by acne.

Because the surface skin is left largely intact, recovery time is shorter than with ablative laser treatments, and most people are able to return to normal activities within a few days.

What are the risks and potential side effects?

Immediately after treatment, redness and swelling similar to mild sunburn are common and usually last 2–5 days. The skin may feel warm or tight, and some people experience temporary darkening or bronzing and dryness before the skin peels away. Less common side effects include acne breakouts, infection, or changes in skin colour (post-inflammatory hyperpigmentation or hypopigmentation). These are more likely in people with darker skin tones. Rare but serious complications include scarring or burns. Your clinician will assess your risk factors and provide advice on how to reduce these risks.

What alternatives are available?

Alternatives include topical treatments, chemical peels, microneedling with or without radiofrequency treatments, ablative laser resurfacing (for more dramatic results with longer downtime), or simply no treatment. Surgery is also an alternative option for some people. Your dermatologist can help you decide which option best suits your skin condition, skin type and your concerns, goals and lifestyle.

What should I expect after the procedure?

You can expect redness, swelling, and a sunburn-like sensation for 2–5 days. Makeup can usually be worn after 24 hours if the skin is intact. The skin then become dry and may feel rough; gentle peeling or flaking may occur. Results develop gradually over several weeks as new collagen forms, with improvement continuing for up to 6 months after a course of treatments. It is very important to adhere to the post procedure instructions given by your doctor. This may involve tailored gentle anti-septic washes and applying moisturisers frequently.

How many treatments will I need?

A single session may produce noticeable improvement, but for best results a course of treatments may be recommended, with sessions spaced anywhere from 2-6 weeks apart. Maintenance treatments may sometimes be advised every 6-12 months to sustain results.

Who should not have this procedure?

Fractional non-ablative laser should be avoided if you have an active skin infection, open wound, recent suntan, or are unable to avoid sun exposure before or after treatment. It may not be suitable for people with certain medical conditions such as connective tissue disorders, or those prone to keloid scarring. Pregnant or breastfeeding individuals are generally advised to defer elective cosmetic laser treatments until delivery or when they have finished breastfeeding.

Who can perform this procedure?

Laser resurfacing should only be carried out by trained healthcare professionals such as consultant dermatologists or practitioners with accredited laser training, working within an

appropriate clinical setting. Proper training, knowledge of anatomy, and access to emergency protocols are essential to ensure safety.

Will I need a consultation?

Yes. A face-to-face consultation is essential to confirm that the procedure is appropriate for your skin and fits with your skin type and goals. Having a discussion of the possible risks and benefits tailored to your skin as well as the alternatives for you is vital. This tailored treatment plan is an important part of your care. You should be given the opportunity to ask questions and time to consider your decision before proceeding.

Where can I get more information?

You can find more information from:

- The British Cosmetic Dermatology Group (BCDG)
- The British Association of Dermatologists (www.bad.org.uk)
- The Joint Council for Cosmetic Practitioners (JCCP)
- NHS guidance on cosmetic procedures

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