

Ablative Laser Resurfacing

What is ablative laser resurfacing?

Ablative fractional laser resurfacing is a treatment that removes tiny columns of skin using focused laser energy, while leaving areas of untreated skin between them to aid healing. Fully ablative laser resurfacing removes or 'ablates' the entire outer skin surface in the treated area. Both approaches stimulate new collagen formation and skin regeneration. Fractional ablative lasers (such as fractional CO₂ or Er:YAG) are commonly used to balance results with shorter recovery, while fully ablative treatments provide more dramatic improvement but with longer downtime and greater risk.

Why might I choose to have this procedure?

You may consider ablative laser resurfacing if you are looking for significant improvement in wrinkles, sun damage or uneven skin texture. Scars are frequently targeted with CO₂ resurfacing - including acne scars, surgical scars or hypertrophic and keloid scars. Fractional ablative treatment can produce excellent results with reduced recovery compared to full-field ablation. Fully ablative resurfacing may be recommended for deep wrinkles, severe photodamage, or extensive scarring when the most powerful rejuvenation is desired.

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 goals as well as how and whether they can be achieved. Potential benefits, risks and side effects and the alternative options should always be discussed by your doctor. You may be advised to avoid sun exposure, retinoids, and certain medications in the weeks before treatment. For fractional ablative resurfacing, application of topical anaesthetic cream prior to the treatment and cooling with air or ice packs during the procedure are usually sufficient analgesia. Fully ablative procedures often require local anaesthetic injections or sedation. During treatment, protective eyewear is worn and the laser handpiece is passed over the skin, delivering controlled ablation. The session usually takes 30–90 minutes depending on the size of the area. After treatment, a wound care regimen is required. You may be prescribed antivirals, antibiotics, or pain relief where appropriate.

What are the benefits of the procedure?

Ablative lasers provide some of the most dramatic improvements in skin rejuvenation and scar remodeling available without surgery. Benefits include smoothing of deep lines and wrinkles, improved skin texture and tone, normalisation of collagen in acne and traumatic scars, resulting in improved appearance and reversal of sun damage. Fractional techniques shorten healing and reduce risks by leaving bridges of intact skin, while full-field ablation can achieve the greatest visible improvement in selected patients, but also carry the greatest risks and take longer to recover from.

What are the risks and potential side effects?

Expected short-term effects include redness, swelling, oozing, and crusting that last 5-10 days (fractional treatments) to two weeks or more (fully ablative treatments). The skin gradually repairs and after a few days, the new skin becomes visible as the older skin peels away. Pinkness may persist for weeks. Infection, cold sore reactivation, acne flare, or slowed and prolonged healing can occur. Changes in pigmentation (darkening or lightening) are more likely in darker skin types, but can also occur in lighter skin. Scarring is rare but possible. Fully ablative resurfacing carries higher risks of infection, scarring, and prolonged redness, but with careful technique and aftercare these risks are reduced. Eye protection is mandatory during treatment to prevent laser injury.

What alternatives are available?

Alternatives include topical treatments, non-ablative fractional lasers (with less downtime but more sessions), chemical peels, microneedling with or without radiofrequency, dermal fillers, botulinum toxin, or surgical options such as facelift or fat transfer. Your dermatologist will advise on which treatment is most suitable for your individual goals.

What should I expect after the procedure?

After fractional ablative treatment, the skin will be red, swollen, and may ooze before crusting and peeling over 5-10 days. Pinkness may persist for several weeks. After fully ablative resurfacing, recovery is more intense: oozing, crusting, and raw skin for 7–14 days, with gradual healing over weeks and residual redness possibly lasting months. Strict aftercare with cleansing, ointments or emollients, and sun protection is essential. Makeup should not be applied until the skin has healed. Results develop gradually over 3 months as collagen remodels, with long-lasting improvement after a single treatment.

How many treatments will I need?

Fractional ablative resurfacing may require 1–4 sessions, spaced weeks-to-months apart, depending on the severity of the condition. Fully ablative resurfacing is usually a one-off treatment, though it may occasionally be repeated many years later if further rejuvenation is desired.

Who should not have this procedure?

You should not have ablative laser resurfacing if you have an active infection or cold sore in the area, recent suntan or sunburn, or if are unable to avoid sun afterwards. It is not

recommended during pregnancy or breastfeeding. People with certain medical conditions (such as uncontrolled diabetes, immunosuppression, connective tissue disease) or those prone to hypertrophic or keloid scars may not be suitable. Recent isotretinoin use may increase the risk of scarring, so treatment may be delayed.

Who can perform this procedure?

Ablative laser resurfacing should only be carried out by Consultant Dermatologists or other appropriately trained medical professionals in a strictly regulated clinical setting. Ablative lasers, particularly, do have the potential to cause harm and permanent skin damage such as scarring if used inappropriately or by practitioners who are not adequately trained. The procedure requires advanced training, knowledge of laser physics and anatomy, and the ability to manage potential complications. Facilities should have access to resuscitation and emergency protocols.

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 and the alternatives before proceeding.

Photographs are usually taken for comparison before and after treatment.

Where can I get more information?

You can find more information from:

- The British Cosmetic Dermatology Group (BCDG)
- The British Medical Laser Association
- The Joint Council for Cosmetic Practitioners (JCCP)
- NHS guidance on cosmetic procedures

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