

Carbon Dioxide (CO₂) Laser Information for Patients

Welcome to Queen Victoria Hospital NHS Foundation Trust

You have been referred for Carbon Dioxide (CO₂) Laser treatment on your scar. This leaflet will give you some information about the procedure and what will happen at your appointment.

Is laser treatment suitable for my scar?

Lasers are used to treat certain scars following burns, trauma or surgery to the skin. This may improve overall scar appearance or function such as colour, tightness, firmness, texture or thickness. Occasionally, only limited effects are achieved from this treatment.

What can I do to prepare for the treatment?

You should avoid exposing your scar to sunshine or use a high factor SPF sun cream for 3 months before and 6 months after laser treatment. You should also avoid using fake tan. This is because it can increase the risk of an uneven skin colour after treatment. More details are provided in the "What will the scar look like after the procedure" section below.

It is important that on the day of the treatment, you do not wear aftershave, perfume or hair gel. Your skin should be clean and free of any moisturiser or lotions. Please do not wear make-up or jewellery on or near the site to be treated.

On the day of your consultation, please bring a list of your medications and dosages, as some drugs may need to be stopped prior to your treatment. If you take Warfarin, you will need to contact your GP to have your international normalised ratio (INR) checked 2 - 3 days before your treatment date. Please bring the result with you. If it is higher than your normal range, please contact us on the numbers on the back of this leaflet as soon as you get the result.

If you are prescribed blood thinners (**e.g. clopidogrel, aspirin, rivaroxaban, apixaban etc**) you may need to stop them for a short time before laser treatment depending on why you are taking them. This will be discussed as part of your laser assessment process and further advice will be given to you. If you are taking blood thinners, the amount of bleeding and/or bruising following the procedure may be worse.

Retinoids which have been prescribed by your doctor (e.g. drugs for acne treatments), should be avoided when having laser treatment. Oral Retinoids (**e.g. isotretinoin (Roaccutane®) acitretin (Neotigason®), alitretinoin (Tocino®)**) should be stopped for 6 months prior to your laser treatment. Topical Retinoids (**e.g. Tretinoin (Retin-A®, Aknemycin Plus®), isotretinoin (Isotrexin®), adapalene (Differin®)**) should be stopped for 2 weeks prior to your laser treatment. This is because it may lead to delayed healing and scarring.

Please let the clinic know if you:

- Have any allergies to medicines including local anaesthetic or dressings.
- Have had Herpes Simplex (e.g. cold sores) as this can be reactivated from laser treatment.
- Are pregnant, as there is an increased risk of permanent pigment (colour) changes or an increased healing time.
- If the wound has broken down or there is an infection in the area to be treated, the treatment must be delayed until the area is healed.
- If you have any new medical diagnosis's or any changes/additions to your medication.

It is recommended that you wear loose clothing in the area to be treated as closely fitting clothes may cause irritation after your treatment.

Some people can feel lightheaded after the treatment so it is advisable to arrange for someone to bring and collect you on the day. If you are having laser treatment near your eyes then we do not recommend that you drive until all the swelling has resolved.

What will happen on the day of the procedure?

When you arrive, you will meet a member of staff involved in the laser treatment. They will explain the treatment to you and answer any questions.

Everyone in the treatment room must wear protective eye wear when the laser is being used. If the area being exposed to the laser is near the eye, special eye shields will be worn. Photographs will be taken of the area to be treated, if you give consent, so that the progress of your treatment can be monitored. The photographs will be kept in your confidential patient records.

On your first appointment with the laser clinic, you will have a small patch test to assess the scar and see how a small area of your skin reacts to the laser. Then you will be booked in for a treatment session in 8-12 weeks time.

Most patients undergoing CO2 Laser treatment are given topical and/or local anaesthetic, which takes around 30 minutes to take effect, depending on the size and number of scars. You will be given 2 appointment slots – the first slot will be to assess the scar and apply the anaesthetic cream. The second slot will be around 40 minutes later to allow time for the anaesthetic cream to take effect. Your patch test/laser treatment will be completed in the second time slot. You will usually be informed of the first appointment only.

The anaesthetic cream should last for up to 4 hours and if you are in any discomfort following this, please take your usual painkillers.

What will the scar look like after the procedure?

It is common for the scar to look red and inflamed afterwards, but this will improve within a few days. In some patients a clear/ straw coloured fluid may initially leak, this is normal. If you have any concerns or if the area becomes sorer, smelly or very wet, please contact the clinic on the number below.

What should I do after the treatment?

You can go home as soon as your appointment is finished.

To achieve the best outcome following laser treatment, please carefully follow the post-treatment instructions given to you.

A dressing may be applied to the treated area and you will be advised when to remove this. Once it is removed, the area can be washed in the shower (please do not have a bath for several days). If undressed (or once the dressing is removed) apply a layer of ointment (such as Vaseline) to the treated area to stop it from crusting. This should be reapplied frequently throughout the day. Do not let the ointment build up to form a thick layer – if this happens gently cleanse the area with a non-perfumed soap and tap water and pat dry with a clean towel before reapplying the ointment.

This is usually only for a few days and then you can return to your normal moisturisation routine. Avoid picking or scratching at the area.

If you wear pressure garments, silicone or make up products you should wait until the area is out of dressings and the skin has healed before applying these.

If you have been given exercises or stretches to do by your therapist, these can be restarted when your dressings are removed.

Please avoid swimming or getting too sweaty (e.g intense exercising) for 2 weeks following treatment.

Potential side effects of CO2 laser treatment:

Skin colour changes: There is a small risk of brown colour changes. If any darkening occurs, due to formation of brown skin pigment, this usually fades over 6 - 12 months. If the skin is made paler, this may be permanent.

Sensitivity to the sun: After your treatment, your skin will be especially at risk of getting sunburnt. Either cover up or use a high SPF sun cream when in the sun for at least 6 months after your treatment.

Infection: Risks of infection can be reduced by following the aftercare recommendations. In very rare cases, if there are complications scarring can become worse. Signs of infection include any changes to fluid or pus leakage as well as excessive redness, heat and swelling appearing at the treated site. If any of those signs appear, please contact the clinic on the number below.

Smoking: Smoking and/or vaping affects the healing process of your skin and should be avoided. If you need advice or help with giving up smoking please contact the Queen Victoria Tobacco Dependency Advisor using the details below:

Email: qvh.smoking-cessation@nhs.net

Telephone: 01342 414000 extension number: 6615

Alternatively you can contact the NHS smoking Helpline on: 0800 022 4332.

Follow up appointments

Most patients require multiple treatments, spaced around 8-12 weeks apart.

Please take note of how long the area takes to heal following treatment and whether there has been any crusting or dryness in the area, as this may be used to inform future treatments. Your practitioner will book your next appointment before you leave.

Scar Assessments

You will be asked, as part of the assessment process to complete a questionnaire and have your scars measured. To improve the service, the information you provide could be used in research. Please let the staff know if you would like your data NOT to be used in this way.

Contact Details

In working hours (08:00 - 17:00 Mon-Fri)

Please contact the Scheduling Team on 01342 414000 ext. 4847 or via email at: qvh.plasticslaser@nhs.net

Concerns out of Hours (17:00 - 08:00 Monday-Sunday and Bank Holidays)

Please contact the Burns Unit on 01342 414 440

In an emergency: If you become severely unwell, please attend your closest A&E department.

Useful Websites

The websites below give useful information about the different types of scars and offer advice and guidance for people living with scars.

www.howtotreatscars.com

www.changingfaces.org.uk

www.dansfundforburns.org

www.katiepiperfoundation.org.uk

www.scarfree.org.uk

Staff at the Laser Clinic:

Laser Practitioners:

Louise Rodgers – Advanced Clinical Practitioner

Catherine Henn – Advanced Clinical Practitioner

Consultant Plastic Surgeons:

Baljit Dheansa

Paul Drake (Clinical Lead for Burns)



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