

Hair Removal

Information and advice for patients

Birmingham Regional Skin Laser Centre

Growth cycle of hair

Some lasers can reduce hair growth. How this works depends on both the growth cycle of the hair and its colour. Hair consists mainly of a hard protein called Keratin, produced by the hair bulb, which is situated deep within the skin.

Hair colour depends on the presence of a pigment known as melanin, which is produced by pigment-producing cells, the melanocytes. The melanocytes are found in the hair bulb. The ultimate colour of the hair is determined genetically and by the type of melanin produced by the melanocytes.

Hair growth occurs in a cycle, with an active growing phase called Anagen and a resting phase called Telogen:

- During the Anagen phase the hair is connected directly to the hair matrix in the base of the hair follicle.
- During the resting Telogen phase the hair bulb moves away from the base of the follicle so there is a gap between the bottom of the hair and the bottom of the hair follicle.

Laser treatment

Laser treatment for hair removal is suitable for all skin types.

How does laser treatment work?

The more commonly used laser systems for hair removal depend on the high level of energy in the laser light being taken up by the melanin pigment within the hair, which converts this energy into heat, destroying not only the hair but the hair matrix and hair bulb at the base of the follicle.

The heat generated in the hair follicle is conducted down to the base of the follicle more easily in an Anagen hair, which is still connected to the base of the follicle. In Telogen phase hair, any heat generated has to cross the gap to reach the future hair-producing region. This is why most effective laser-assisted hair removal occurs when the follicles are in the active Anagen phase. Each hair may be in any stage of the growth cycle, but it is only those in the Anagen phase that will respond to the treatment. Because not all hair follicles are in this phase, multiple treatments are almost always needed.

The best results also occur when there is plenty of target pigment melanin in the hair. **Therefore white, blonde, ginger, red and grey hair will not respond.**

We wish to stress that it is unrealistic to expect all unwanted hair to disappear with laser treatment.

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What are the benefits?

The major advantages of laser-assisted hair removal are:

- It achieves long lasting hair removal more effectively than other methods of hair management such as electrolysis, waxing and threading.
- It is much faster and less painful than other hair removal methods such as electrolysis.
- Hair growth becomes slower, a lot finer and thinner.
- It reduces ingrown hairs.
- Confidence is achieved.

What are the risks?

Blistering can occur during the first 3 days following your laser treatment. It is not common but this can be an indication of sun exposure, make-up or perfumed products left on the skin. This normally resolves within 3-7 days after your treatment and should be kept moist with an ointment until healed. For this reason it is important that you remove any make-up prior to treatment and inform staff if you have been exposed to the sun.

The pigment in your skin can be affected by the laser. This can result in pigment loss (hypopigmentation) or pigment increase (hyperpigmentation):

- **Hypopigmentation** (pigment loss) – this is rare but can be permanent.
- **Hyperpigmentation** (pigment increase) - darkening of the skin occurs especially in black/Asian skins or those that tan easily. Hyperpigmentation usually fades but may take up to 6 months and sometimes longer. This has been a complication in 17 in 100 of those being treated.

Scarring is very rare with laser hair removal and much less common than with electrolysis. 1 in 800 patients experience scarring. If you experience any of the complications discussed we advise you contact the clinic immediately and a practitioner will advise the care to follow.

What are the alternatives?

There are alternatives to hair removal such as waxing, shaving, threading, plucking, depilatory creams and electrolysis. However, those that are suffering from excessive hair growth find that they are already using these methods on a regular basis and they do not seem to help reduce the hair growth or density of the hair. When having laser-assisted hair removal, patients often notice that hair growth and density has reduced. They find that hair growth is easier to manage and that they can remove hair less often.

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Having the treatment

The first stage of the treatment process involves a test patch. The test patch site must be monitored over a 1 week period before full treatment can be carried out. You are observing for any signs of blistering, scab formation, loss of skin pigment or increase in pigmentation. Please report any adverse reactions for the continuing safety of your treatment (this will not necessarily mean that you will have to stop treatment).

The treatment can be uncomfortable but is greatly reduced by cooling the skin with cool air and Aloe Vera Gel. It feels most like an elastic band being snapped against the skin. The laser burns hair near the skin surface and you will be aware of a burning smell, although your skin is not being burnt.

For your safety and the practitioners' safety you will both be required to wear goggles throughout the treatment. Please do not remove your goggles during your treatment.

Treatment time will vary from each individual and multiple treatments will be required.

Preparation before treatment

1. Please prepare for your appointment. Your hair should be as short as possible, just visible above the skin surface. Hair that is left too long will be shaved by the practitioner. Please note that this may reduce the available treatment time.
2. While having this treatment you can choose to shave, trim or use depilatory cream between treatments. If you choose to shave or trim please do so 24 hours before your treatment. Do not shave on the day of treatment. If you want to use depilatory cream please use it 3 days prior to your treatment.
3. Please avoid bleaching. If bleaching please ensure that the hair has sufficiently grown by the time of your next appointment to show the natural colour of the hair so that it can be treated.
4. Between treatments do not remove any hair growth in the treatment area by means of electrolysis, waxing, threading, epilating or plucking.
5. It is necessary to remove make up, perfume and topical anaesthetic creams from the treatment site. Skin wipes will be available in the laser room for your use. You may also be asked to remove jewellery around the treatment site.
6. Please tie your hair back.

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Aftercare advice

1. The skin will be a little red and swollen around the treatment site. This usually settles within 24 hours.
2. Blistering and weeping can occur but this is usually only in the first couple of days and settles completely.
3. The skin around the treated area may respond with a slight "crusting" which is a normal reaction. If you need to cool your skin further after treatment we recommend the use of Aloe Vera Gel which also soothes and promotes skin recovery. This can be used as frequently as necessary and it is helpful to bring it to your treatment sessions for your use. The gel is available from most chemists and health food stores.
4. Some hairs will remain in the follicles but will naturally fall out with time. The length of time for this process varies between individuals but it is usually completed within 2 - 3 weeks. It is important not to pick at the hair or skin. Your skin will often feel smoother after treatment but after that the hair may appear to lengthen so you may wish to remove the hair. You can resume your chosen method of hair removal as soon as you consider that your skin will tolerate it. For instance some people will be able to shave their hair the next day after treatment.
5. After treatment do not overheat or irritate the treated area. For example in the 24 hours after your treatment avoid hot baths and showers, saunas and swimming. Similarly do not apply astringent lotions on the treated area.
6. Whilst undergoing treatment it is important to wear a sunblock SPF 30 or above on a daily basis on the treatment site to reduce the risk of skin pigmentation changes. This does not apply to treatment sites covered by substantial clothing. It is important to continue to use the sun block for at least 6 weeks after the last of your course of treatments.
7. During treatment the laser also works more effectively and with greater safety if the skin is not tanned. We would strongly advise that during the course of laser treatments, that you do not expose the treatment site to sunbathing, sun beds or use tanning products as this will delay your ongoing treatments.
8. Makeup/ heavy moisturiser must not be applied until 24 hours post treatment.

Check your skin

You should observe for any signs of blistering, scab formation, loss of skin pigment or increase in pigmentation. Please report any adverse reactions such as these for the continuing safety of your treatment. This will not necessarily mean that you will have to discontinue treatment.

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Your next appointment

Your next appointment will be booked by the receptionist on the day of your appointment; otherwise it will be sent through the post.

As long as the preparation and after care advice is followed, no further follow-up care is required. You will not need to visit your doctor unless we advise you to do so.

How to contact us

If you have any concerns or questions please contact:

Skin Laser Centre

Monday – Friday 8.30am – 3.45pm

0121 507 6639

swbh.dermlaser@nhs.net

If you experience any adverse reactions from your laser treatment, which cannot wait until our opening hours please seek medical advice from your GP.

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