

What is the difference between Lasers and Intense Pulsed Light (IPL*)

There is no shortage of information available about laser/IPL hair removal and while some of this is accurate and the claims made are justified, much is inaccurate misleading and downright dishonest.

At Mapperley Park Clinic, we use both lasers and IPL and try to provide balanced information about all the services we provide. We hope that this information will help you to understand what lasers and IPLs are and, more importantly, what they are not!

You may not know is that laser/IPL use is regulated by law – it is illegal to operate a laser/IPL system unless registered with the Healthcare Commission. See page 4 for more information.

Permanent Hair Removal: truth and fiction

You may not know that even claiming 'permanent hair removal' for laser/IPL is illegal – this claim can only be made for electrolysis techniques. The reason for this is that while permanent hair removal is achievable with laser/IPL, it cannot be guaranteed. Interestingly, while electrolysis can claim to be permanent, we know of no-one who would choose it as a depilation method over laser/IPL.

The Advertising Standards Agency can take action against anyone claiming permanent hair removal so words such as 'permanent hair reduction' are commonly used to suggest permanence; the use of such slippery terms is often a good indication that someone is trying to mislead you!

Some Laser/IPL users make claims about the number of treatments that will be required but, **if it is not possible to promise permanence, how can it be possible to tell you how long it will take.**

The truth is that it is just not possible to be entirely accurate about the number of treatments required: there are just too many factors involved to be able to be accurate for any individual. Laser/IPL treatment can achieve permanent results and will provide excellent results for most people. A full consultation should be provided by a hair removal specialist to assess individual circumstances.

What is the difference between Laser and IPL?

The difference is largely technical – lasers deliver energy in a single wavelength; IPLs deliver across a range of wavelengths. Both methods can work but not all systems work equally well. Both lasers and IPLs use pulses of light to heat up hair follicles to destruction without (in theory) damaging the skin. In general, high power (high cost) systems will be more sophisticated than low power (low cost) systems and will deliver better results – however a poor operator with a good system will give poor results.

Sophisticated, high power systems inevitably cost more but they are more likely to be operated legally – a good laser/IPL system can cost £50,000 but you can buy something for £6,999. If your service provider spends £50,000 on a system, they are not likely to jeopardise their investment by operating illegally. **Find out exactly what system is being offered and whether the user is registered.**

Claims that any system is 'four steps ahead' or 'more advanced' or 'a step beyond' should be treated with extreme suspicion – what are the 'steps' – in what way is the system 'more advanced' – 'a step beyond' what? Statements of this type are just being used to pull the wool over your eyes.

Low quality IPL users may claim that their systems are lasers (1 in 3 of current yellow pages advertisers are doing this – write down the name of the system and find out what it actually is – if it is being misrepresented, draw your own conclusions.

Trust your own judgement based on the responses you receive to sensible questions.

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Which is better, Laser or IPL?

Which is better, a car or a motorbike? **They can both get you where you want to go.** There are Ferraris and Ducatis but there are also Reliant Robins and mopeds. It all comes down to what is being claimed. Do not expect Ferrari performance from a moped: having said that, an abused Ferrari will not perform as it claims while a well maintained moped will provide years of honest service.

There must be 100 laser/IPL systems on the market and each one is different. In 10 years of hair removal at Mapperley Park Clinic, using 10 systems delivering 10,000+ treatments on 3,000+ individuals, we would say that there is no overwhelming advantage for laser over IPL (or vice versa) but individual systems vary. Some lasers are excellent and some IPLs are very poor (and vice versa).

Unfortunately there are few like-for-like clinical comparisons available to compare Lasers with IPL and no system-to-system comparisons that we have seen; all that can be said is that they are both potentially effective **technologies**. So, if anyone tells you that an IPL is better than a laser, (or vice versa), you should ask for good evidence to back it up.

If there was any clear advantage for one technology over the other, everybody would use that technology; after all, nobody uses a horse and cart any longer.

It is sometimes claimed that IPLs are faster than lasers but these claims cannot be justified. The speed of treatment depends on how powerful the system is; a high-power IPL will be faster than a low power laser but to make any generic claim is like saying that motorbikes are faster than cars (or vice versa). In any case, speed is just one variable and is not a measure of effectiveness – one of the most effective systems in our stable is also the slowest because of its very small spot-size.

Comparing our systems, the Alexandrite laser is the fastest, covering around 1.14 cm² per sec: our Lynton Lumina IPL comes a close second at 1 cm² per sec. However, the IPL uses time consuming gels and the Alex will cover the same ground in approximately $\frac{1}{2}$ of the time. Our other systems are much slower and therefore only selected where their benefits outweigh other disadvantages.

Claims that any individual IPL system can remove hair 'in every cycle' are only true in the same way that a pair of tweezers removes hair 'in every cycle'. Hairs that are not actively growing will simply grow back again. Only hairs that are caught in the 'anagen' phase will be effected.

Claims that a system can target white or blond hair are quite simply false: target pigment is required for both light and infra-red 'heat' to be absorbed: no pigment = no absorption = no result.

IPL users may claim that lasers are more painful than IPLs, or that IPLs are 'gentler' than lasers. This is completely unjustifiable and like saying that motorbikes are more comfortable than cars. What it comes down to is the energy available and how the energy is managed.

We use a high power IPLs that hurt (because they work) and have seen low power lasers that do not hurt (because they do not work).

We use effective, high power systems – both laser and IPL – and manage pain through effective skin cooling causing minimal discomfort.

Skin cooling manages the pain associated with high energy treatment and:

If there is no pain at all there is no gain at all.

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Who should carry out the treatment?

Someone who knows what they are doing! The important factors are:

- The experience of the clinic (or salon) concerned
- The expertise of the operator

You wouldn't want your Ferrari driven by a pizza delivery boy and you should not have your expert system operated by an untrained person, whether a doctor, a nurse or a therapist.

A doctor is not necessarily better than a nurse or a beauty therapist. What is required is a trained and experienced person with a good understanding of the principles and the operation of the system.

The gold-standard is the BTEC Hair Removal qualification but all operators should be able to demonstrate 'Core of Knowledge' training. Most operators will have the manufacturer's training but many operators will only have been shown what to do informally by someone else who might, or might not have had proper training themselves.

A professional service provider will put its expertise at the forefront of its service; others will use weasel-words to mislead you. Trust your instincts when you ask about the expertise of the operator.

Are IPL's safer than lasers?

No, they just carry different risks. Lasers can produce a pulse of light that can be dangerous 10 ft away. IPLs produce a pulse of light that can do no damage at this distance. However, **both technologies have the potential to blind you at 10 inches** and at this distance, the IPL can damage both eyes where the laser will only damage one. So which is safer?

What it comes down to, once again, is the experience of the service provider and the expertise of the individual operator.

A good operator is safe, using any system, a bad operator of the very best system is just not safe.

Any claim for any system to be safer than any other should be treated with caution. We have used both lasers and IPLs and have 10 years of records to show that are both very safe if they are in safe hands.

Don't lasers scar ?

Both lasers and IPLs are capable of scarring if they are misused. Mapperley Park Clinic has been measuring its results since 1993 and, although we have seen many scars caused by Laser/IPLs referred to us from other operators, we have not had a single case of scarring relating to depilation at our clinic.

Our scarring results are published in our Client's Guide – ask the operator if you are concerned. If they don't know how safe their system is, you should be concerned.

Don't lasers cause more side-effects?

No: in general the same side-effects occur with both lasers and IPL, although some lasers do have a greater potential for pigment disturbance. The potential for side-effects will depend on the system, the method and most importantly, the operator's competence. A proper consultation should be made to find out if there are any issues that might increase the likelihood of side-effects and a test patch should always be carried out at least 3 weeks before treatment to check for pigment disturbance.

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How do you choose which clinic you go to?

Take some simple precautions and you will make a good decision:

- Make sure that the service provider is registered and is operating legally.
- Ask the right questions and make a note of the answers.
- Do some research – the internet is a mine of information, some of which is even accurate!
Read between the lines when looking at written information – glossy leaflets are not necessarily more reliable than A4 hand-outs – it is what is claimed that counts.
- Trust your judgement – **if you are well informed, your judgement will be right.**

You may not know that the Care Standards Act 2000 requires any person or business providing treatments using Lasers, IPL (Intense Pulsed Light) and LHE (Light, Heat, Energy) to:

- Register with the Health Care Commission.
- Comply with the Regulations and Standards.
- Be inspected by the HC.

The purpose of the legislation is to ensure that laser/IPL providers are safe, informed, accountable and consistent. **Any Laser/IPL provider that is not registered is operating illegally and will be operating without valid insurance.**

You should ask any laser/IPL provider some questions:

- Are you registered with the Health Care Commission?
- Have you been inspected by the Health Care Commission?
- Do you have a Health Care Commission registration number? Format is C030000111
- Will I be able to see a copy of the Health Care Commission inspection report?
- Will I be able to see a copy of your Client's Guide?
- What hair removal systems do you use?
- What kind of technology is this [laser or IPL]?
- How long have you been using the system?
- What training has the operator taken?
- How many people has your clinic treated?
- How many treatments will it take?
- Is it permanent?

The receptionist may not always have all of this information to hand but you should be concerned if they have no information at all and you will know if they are fibbing!

You also have a right to enquire of the Healthcare Commission whether any laser/IPL provider is registered (**many claim to be when they are not**) and you can view inspection reports at.

www.healthcarecommission.org.uk/YourLocalHealthServices/PrivateHealthAZ/fs/en

Unfortunately, not all reports are currently published, but you can get a copy by calling the new central telephone switchboard for the Healthcare Commission on:

Tel: 020 7448 9200 Fax: 020 7488 9222
email: feedback@healthcarecommission.org.uk