

Hair removal

The Ellipse hair-removal method uses short, safe bursts of light to remove unwanted hair from the body in minutes. This replaces shaving, waxing, tweezing and creams as a hair-removal method.

A thin layer of gel is applied to the skin before treatment. Hair contains pigment which absorbs the light and converts it into heat. The hair transmits the heat to the hair follicle which is destroyed and is unable to produce a new hair. Hair growth is cyclical as hair follicles go through resting and growing phases, which is why it is necessary to repeat the treatment at intervals. At least three to six treatments between one and three months apart are needed.

Treatment of an upper lip takes about five minutes, and a back or legs take 60 to 120 minutes. No anaesthetic is required - the sensation during treatment is similar to that of a rubber band being snapped on the skin. It is important not to remove hair by plucking, tweezing, waxing or the use of creams as possible containing a hair can be destroyed by the light. It is also important to avoid tanning before and during the treatment period as a tanned skin will absorb more light and make the treatment less effective. Generally, no post-treatment care is necessary, but a soothing cream can be applied for a few days after treatment.

The most efficient treatment is seen with dark hair, and the lighter the skin, the more pronounced the distinction between hair and skin colour. However, Ellipse has pre-programmed settings for different hair and skin colours to adjust for individual needs.

Pigmentation

The treatment of pigmented lesions is based on "selective photothermolysis". The aim of treatment using Ellipse I²PL is to destroy the excess pigment existing in the skin tissues.

The goal is to destroy the pigment without damaging the surrounding tissue. To do so, we need to know the target chromophore, wavelength to be used, duration of the pulse and right energy.

Erythema, the reaction of the skin, will develop shortly after treatment. Pigment should darken, again within a few minutes. Laser, crusting will develop and will last for 1-2 weeks. Patient should expect 1-2 treatment sessions before clearance of all lesions. The final result and the number of treatments depend on a number of factors e.g., pigmentation, position (dermal or epidermal) and colour of the lesion, previous treatments, pre-treatment care, the treatment procedure, post treatment care, and the experience of the physician.

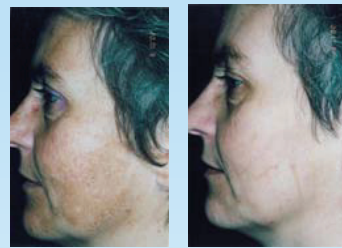
Hair Removal



Before After 5 treatments

Courtesy of JP

Pigmentation Removal



Before After 1 treatment

Courtesy of Dr Peter Bjarring

Facial Veins



Before After 3 treatments

Courtesy of Dr Peter Bjarring

Skin Rejuvenation



Before After 1 treatment

Courtesy of Dr Christine Dedericks

Acne Removal



Before After treatment

Courtesy of Dr Shan

Port Wine Stains



Before After 3 treatments

Acne treatment

Acne is caused by the body's increased production of the hormone androgen, which stimulates the sebaceous glands to produce more oil. This causes the glands to become blocked so that the oil cannot come up to the surface of the skin. Skin bacteria feed on and break down the oil. As the bacteria multiply, waste products and sebaceous acid are produced, causing the sebaceous glands to become inflamed. This causes blackheads, whiteheads or pimples to be formed.

The Ellipse treatment works by reducing the blood supply to the sebaceous gland, which slows down production of the body oil called sebum. Treatment takes about 20 minutes in the clinic, including consultation and preparation. A typical course of therapy includes four treatments, three weeks apart. The best results are achieved on inflammatory acne. The skin should be relatively pale at the time of treatment, as too much light will be absorbed by a dark complexion. No anaesthetic is required, and any discomfort is similar to how it feels after spending a day in the sun.

The acne treatment is a combination therapy. Adapalene (branded as Differing) cream or gel must be applied once every evening to reduce the inflammation caused by the acne and to reduce the thickness of the skin in the treated area. No post-treatment care is generally necessary, but an ice pack or ointment can be applied to the face immediately after treatment. The bacteria are difficult to eradicate completely, so the doctor will probably recommend using adapalene cream for some months after the Ellipse treatment has ended.

Although results differ from person to person, a recent clinical study showed that 58% of acne lesions disappeared after the Ellipse treatment, compared with 33% improvement with the application of topical cream alone.



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The Comprehensive Aesthetic Solution



CLINICAL PROVEN
SAFE AND EFFECTIVE

How does Ellipse Technology work?

The Ellipse I²PL (Intense Pulsed Light) system is used for the treatment of a wide range of skin conditions, including:

- * Removal of excess hair on any part of the body - all skin types
- * Vascular lesions such as thread veins and port wine stains
- * Acne
- * Pigmented lesions: freckles, age spots
- * Sun-damaged skin

Light is a form of energy. White light, or normal light, is made up of many different colours, or wavelengths. These wavelengths have different energies that determine how far the light can travel. This also happens in the skin, in which light can travel only a certain distance, called the penetration depth. The light from an IPL system can penetrate a few millimeters into the skin, which is deep enough to be able to remove unwanted hair and to treat blood vessels, acne or epidermal pigment.

Intense Pulsed Light works in the same way as laser light, the difference being that a laser uses light of one specific wavelength and IPL uses an entire waveband. The different wavelengths can penetrate the skin to different depths, so using IPL is like using a group of lasers in a single treatment. The Ellipse I²PL system emits short, safe bursts of light from a flash-lamp to treat specific skin conditions. The Ellipse system's built-in computer precisely controls the speed and amount of light delivered to the site of the specific skin condition.

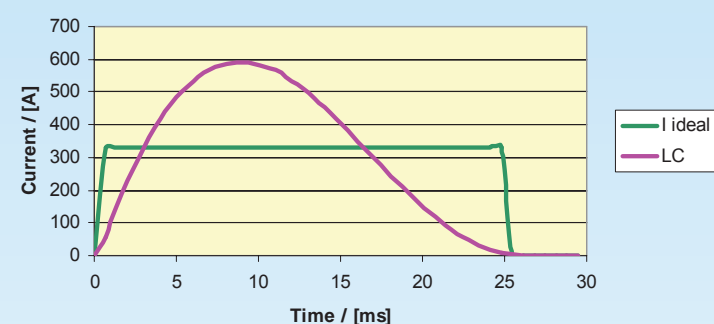
The second-generation Ellipse I²PL system gives better treatment because it ensures that the light contains only the wavelengths that are needed for treatment. It is also safer since treatment requires less energy. The light used is completely safe, visible light. Potentially harmful wavelengths are removed by the unique Ellipse dual-mode filtering system.

The Ellipse system works on the principle of Selective Photothermolysis, and converts light into heat energy. The target (hair, a small blood vessel or a brown mark) is hit with a very short pulse of light with just the right amount of energy to get the desired result without damaging the surrounding tissue. When a beam of light enters the body, natural pigments such as melanin and Haemoglobin absorb the light. IPL targets the pigment that is causing the problem.

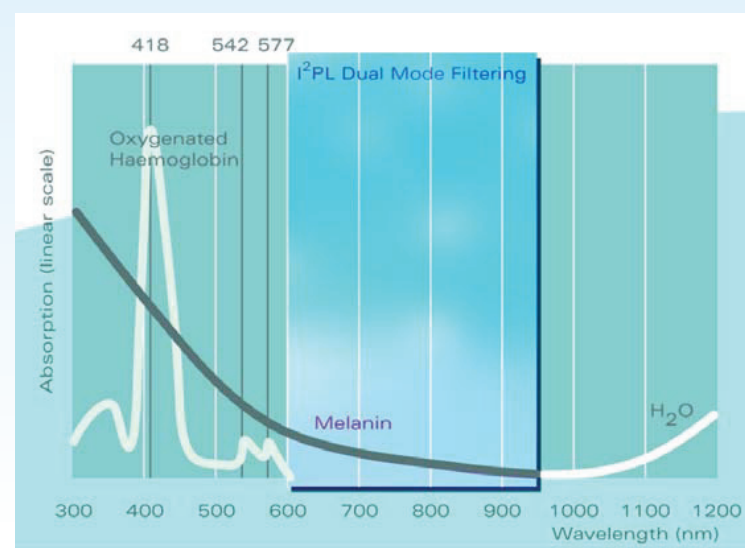
For removal of hair or brown marks on the skin, the target is melanin. For treatment of vascular problems and acne, the target is haemoglobin, and for treating sun-damaged skin both melanin and haemoglobin may be targeted. Ellipse has been clinically proven to be safe and effective. If you wish to consult the papers on the clinical trials, they can be viewed on the Ellipse website: www.ellipse.org



Current flow in Xenon Flash Lamp



Square pulse



I²PL Dual Mode Filtering

Treatment of sun-damaged skin

Our skin ages due to excessive sun exposure and decreased production of collagen. Skin rejuvenation treatment with Ellipse helps to keep the skin looking younger and fresher. It removes age spots and diffuse redness, reduces uneven pigmentation and improves skin texture.

As skin rejuvenation is based on light absorption in melanin and haemoglobin, treatments are most effective in patients with light skin who are not sun-tanned. The lighter the skin, the more pronounced the contrast between the age spots and blood vessels. However, Ellipse has pre-programmed settings for different skin colours so that the correct energy output is delivered for each individual's complexion.

A full-face treatment takes about 20 minutes, and one to three treatments are needed to obtain the desired results. No anaesthetic is required during treatment - the sensation is similar to the feeling of the skin after a day in the sun. It is important to avoid tanning before and during the treatment period as tanning makes the treatment less effective.

No post-treatment is necessary, although people with sensitive skin may benefit from applying an ice pack immediately after treatment or applying an ointment prescribed by the doctor. It is recommended that a sunscreen (minimum SPF 60) should be used for a few weeks after treatment.

The skin may look a little "dirty" for a few days following treatment, but after that it will look smoother and fresher. Patients may choose to have one or two annual maintenance treatments to keep their youthful appearance.

Treatment of thread veins

Thread veins on all parts of the body can be treated. The most common treatments are for superficial veins in the facial, chest and leg areas. As the treatment relies on absorption of light by the haemoglobin in the blood, the most effective results are seen in light skin. However, Ellipse has pre-programmed settings for different skin colours that deliver the correct output for individual complexions.

Thread veins are small blood vessels near the surface of the skin, technically known as telangiectasias. Haemoglobin in the blood absorbs the light from Ellipse and converts it into heat, which destroys the protein in the wall of the thread vein. The veins gradually and safely disappear after treatment.

To ensure optimal light transmission to the blood vessel, a thin layer of gel is applied to the skin before treatment. A single treatment takes from 10 to 20 minutes, depending on the area to be covered and the number of separate blood vessels. No anaesthetic is needed, and the sensation during treatment is similar to a rubber band being snapped on the skin, followed by a warm sensation lasting several minutes. Patients may wish to cool the skin after treatment. The number of treatments depends on the body site and the severity of the thread vein. Clinical studies have confirmed that one to four treatments about one month apart are needed.

Tanning should be avoided before and during the treatment period, as tanned skin absorbs more light, making treatment less effective. Generally, no post-treatment care is needed, but a soothing cream may be applied for a few days after treatment. Sun exposure should be limited and a sunscreen (minimum SPF 60) is recommended for a few weeks after treatment.

Compression (surgical) stockings should be worn for two weeks after treatment of thread veins on the legs. If larger veins on the leg have already been treated by surgery or sclerotherapy, Ellipse treatment should be delayed for at least one month to allow the healing to be complete.