

ADVANCED LASER SKIN CLINIC

Laser hair removal

A handbook

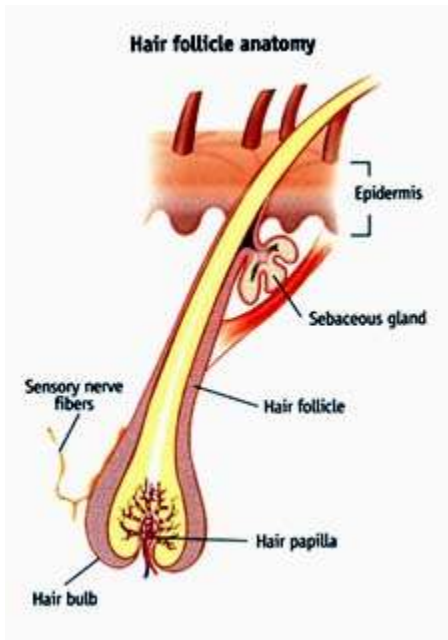
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ANATOMY OF A HAIR FOLLICLE



Terminal hair (hair on our bodies) contains pigment called melanin. The melanin is present in the hair shaft. Laser hair removal depends on the absorption of laser light by the color (melanin) in the hair. Consequently, laser does not work on blond hair or gray hair as it has no color.

When an appropriate energy source (such as a laser) is directed at the skin, light is primarily absorbed in the hair shaft melanin. Heat is generated and diffuses to the surrounding follicular epithelium.

WHAT IS A LASER?

A laser is a device that concentrates light into an intense, narrow beam. Hair removal devices available today include:

694 nm ruby lasers

755 nm alexandrite lasers

800 nm diode lasers

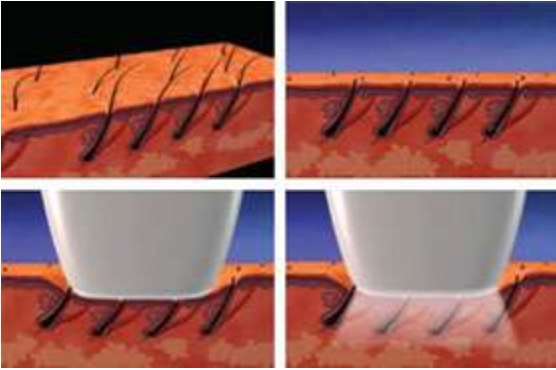
1064 nm Nd:YAG lasers

In general the deeper the laser goes (higher wavelength), the safer it is on darker skin. The hair removal laser works by a principle called Selective Photo-thermolysis. The laser is pulsed (turned on) for a millisecond emitting a gentle beam of light on to the skin. The light energy passes harmlessly through the skin, but is absorbed by the pigment in the hair follicle and hair shaft. By absorbing this laser energy, the hair follicles are disabled, impairing their ability to grow. The laser is effective on hair follicles in the active growth phase (anagen).

The laser was developed from years of research. The laser parameters were carefully defined to inhibit regrowth by studying the anatomy of the hair follicle and matching the laser light and pulse duration to the follicle size, depth, and location to safely and effectively remove hair.

WHAT IS LASER HAIR REMOVAL?

Hair removal laser works by a principle called Selective Photothermolysis. The laser is pulsed (turned on) for a millisecond emitting a gentle beam of light on to the skin. The light energy passes harmlessly through the skin, but is absorbed by the pigment in the hair follicle and hair shaft. By absorbing this laser energy, the hair follicles are disabled, impairing their ability to grow. The laser is effective on hair follicles in the active growth phase (anagen).



Around 3-10 days after treatment hairs will begin to surface. Most of these hairs were treated and are "falling out" it is not regrowth. The hair follicles need to purge the hairs that remained under the skin. Please refrain from waxing, plucking, or bleaching between treatments (shaving is okay).

WHO IS A CANDIDATE FOR LASER HAIR REMOVAL?

Anyone who has all the below:

Naturally dark hair (in the area to be treated).

Is not on accutane or any medications that cause photosensitivity.

Has passed puberty

WHICH LASER IS RIGHT FOR YOU?

While every skin color can be treated with laser, it is important to understand that not all lasers are the same. This is especially true when selecting a laser to treat darker or pigmented skin.

694 NM RUBY LASERS: VERY PALE SKIN WITH DARK HAIR

755 NM ALEXANDRITE LASERS: PALE SKIN WITH DARK HAIR

800 NM DIODE LASERS: PALE TO OLIVE SKIN WITH DARK HAIR

1064 NM ND:YAG LASERS: DARK SKIN WITH DARK HAIR.

HOW TO PREPARE FOR LASER HAIR REMOVAL?

Shave the area to be treated as close as possible day of your treatment.

Do not use any foundation, tan creams etc.

Do not use deodorant (if treating your underarms).

WHAT SHOULD YOU EXPECT DURING TREATMENT?

You will be given safety glasses for your eyes.

Always look away from the laser or keep your eyes closed.

You will feel a quick 'rubber band snap' sort of sensation.

Your skin will look a little red and will have some oedema. This will subside within a few minutes to a few hours.