

FACT SHEET

Laser and Light-Based Hair Removal: In-Office and At-Home Use

Unwanted facial and body hair is a common problem that can be a source of distress for both men and women. Dermatologist Tina S. Alster, MD, FAAD, clinical professor of dermatology at Georgetown University in Washington, D.C., reviews the in-office laser and light-based hair removal options, and provides advice for consumers when considering the latest do-it-yourself laser hair removal devices.

Background

- Excessive hair growth is classified as either hypertrichosis or hirsutism.
 - Hypertrichosis is the excessive growth of body hair in a normal or abnormal pattern. It may be genetic or due to medications, hormones, malnutrition, tumors or metabolic problems.
 - Hirsutism is excessive growth of hair in women, but in a male pattern – such as the beard, mustache or lower abdomen and may be due to hormonal problems, medications, tumors or heredity.
- A wide range of treatment options for managing unwanted hair have been available over the years, such as shaving and waxing, but these methods are temporary and offer varying degrees of success.

In-Office Laser and Light-Based Hair Removal

- The Technology
 - Dermatologists use lasers and light sources to safely and effectively treat larger areas of unwanted hair with minimal patient discomfort and fewer complications than other hair reduction methods.
 - Most lasers are equipped with a cooling device that reduces the discomfort from the laser light and also protects the top layer of skin from excessive heating and potential changes in pigmentation.
 - Laser and intense pulsed light (IPL) devices send specific concentrated beams of light through the skin that are absorbed by the melanin (dark) pigment present in the hair follicle shafts.
 - Since hair grows in cycles, repeated treatments are necessary to destroy the hair follicles.
- Types of Lasers
 - The ruby, alexandrite, diode and intense pulsed light systems were the first lasers approved by the U.S. Food and Drug Administration (FDA) for hair reduction.

- Lasers and light sources work best on light skinned, dark haired individuals, as the light from these lasers is not significantly absorbed by dark pigments in the surrounding skin.
- Devices with longer wavelengths, such as Nd:YAG lasers, have the ability to treat darker skin types.
- What Patients Should Know
 - While these procedures may be offered in informal settings such as shopping malls, spas and walk-in clinics, it's important for patients to choose an experienced health care provider. The treatments should be performed by or under the direct supervision of a dermatologist or other physician who has appropriate training and expertise.
 - In general, three or more treatments are required to achieve permanent hair growth reduction.
 - Darker hair responds best to laser hair removal.
 - Lighter-colored hair is least responsive, but topical medications can be used in an effort to increase effectiveness.
 - Patients seeking laser hair removal are advised to avoid tanning or sunless tanners and to use a broad-spectrum sunscreen for up to six weeks prior to treatment.
- Side effects
 - The most common side effects include discomfort, swelling and redness that last one to three days.
 - Other possible side effects include blistering, herpes simplex outbreaks, bacterial infections and temporary skin lightening or darkening (especially in patients with skin of color or those with tans).
- Expected Results
 - The percentage of hairs removed per session varies by location, with thinner-skinned areas (e.g., armpits and bikini area) generally responding better than thick-skinned areas (e.g., back and chin).
 - Approximately 10 percent to 25 percent reduction in hair growth can be expected with each treatment.
 - Treatments are repeated every four to eight weeks.
 - The hair that re-grows following treatment tends to be lighter and finer in texture.
 - Patients are instructed to avoid sun exposure and to use a broad-spectrum sunscreen with a Sun Protection Factor (SPF) of 30 or higher following the procedure.

At-Home Devices

- Treatment Trends
 - In recent years, there has been a growing trend to transition high-end physician-provided treatments for use directly by consumers.
 - Improvements in laser and light technology over the last decade and an increase in demand for aesthetic medicine from consumers have created the opportunity for laser manufacturers to begin offering home-use devices with impressive clinical efficacy.

- The Market
 - In 2008, two manufacturers launched FDA-approved laser hair removal devices for at-home use that are compact and portable.
 - Originally only available by prescription, consumers can now purchase these devices directly from the manufacturer or other direct-to-consumer venues.
- The Results
 - In most cases, long-lasting results comparable to professional laser hair removal devices administered by a physician can be achieved in six to eight treatments.
 - Occasional touch-up treatments may be required after optimal results are achieved.
 - While at-home treatments are generally safe, they can pose a concern for some people – including those who are tan or have darker skin or those with certain pre-existing skin conditions.
 - To ensure the highest level of safety and efficacy, consumers are encouraged to discuss the best laser hair removal options for their skin type with their dermatologist before trying an at-home procedure.

See your dermatologist for successful diagnosis and treatment of skin, hair and nail conditions.

Find a dermatologist by visiting the American Academy of Dermatology's Web site at www.aad.org.

#