

An Update on Therapeutic Options for Unwanted Hair Growth

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Introduction

Unwanted hair growth is a common problem and many patients with unwanted hair seek advice regarding their treatment options. It is an issue that has garnered more attention in recent years and is being discussed in the primary care setting with increasing frequency. Excessive hair growth conditions, such as hypertrichosis and hirsutism, are caused by androgen overproduction, increased sensitivity to circulating androgens, other metabolic and endocrine disorders, or exogenous drug use and, thus, need to be properly evaluated by physicians. There are numerous options for hair removal that differ in efficacy, cost, and patient preference. Patients typically try several methods of hair removal prior to seeking help from a physician.¹ As a result, it is efficacious for physicians to be well aware of different hair removal methods to better inform their patients on possible treatment options.

Threading

Threading is an ancient hair removal procedure practiced in Middle Eastern



and Asian countries. It is used to give areas, such as the eyebrows, an aesthetically pleasing shape. In threading, the beautician holds one end of a long cotton thread in her mouth and grasps the eyebrow hairs between the thread, which is wound around the fingers of the operator's hand like a loop. The thread is looped around individual hair shafts or a few shafts together and the hairs are quickly pulled out with brisk movements in rapid succession.² Side effects include pain, acute erythema during and after the threading procedure, and, rarely, folliculitis, hyperpigmentation, and depigmentation.²

Shaving

Shaving is a popular and frequently used method of removing unwanted body hair, as it can be considered fast, effective, easy, and cheap. Contrary to popular belief, shaving does not affect the width or rate of regrowth of individual hairs.³ Shaving is a convenient and inexpensive method; however, its disadvantages include the need to shave frequently, skin irritation, abrasions, and stubble.⁴



Bleaching

Many women with hirsutism use heavy make-up to disguise facial hair. Others use bleaching agents to remove natural hair pigment, either partially or totally, so as to disguise the presence of unwanted hair. The active ingredient in hair bleach is hydrogen peroxide, which bleaches, softens, and oxidizes hair.³ This agent is inexpensive and easy to use. The disadvantages of bleaching include skin irritation, hair discoloration, and the prominence of bleached hair against tanned or naturally dark skin. The addition of persulfate to boost peroxide bleach may occasionally result in generalized urticaria, asthma, syncope, or shock.⁴



Waxing

Waxing is one of the oldest methods of hair removal and provides a uniform method of plucking hair. The

technique involves the application of melted wax to hair-bearing skin, which upon drying, is rapidly peeled away from the skin in the direction opposite to hair growth.² This procedure pulls out the hairs at the level of the hair bulb, and results generally last two or three weeks longer than other temporary methods.⁵ As the wax must be removed in one quick motion, the procedure can be very painful and some hairs may not be plucked. In addition to treatment discomfort, waxing has been reported to cause folliculitis, skin irritation, and keloid scars.²



Electrolysis

Electrolysis is considered to be a permanent method of hair removal. However, a successful outcome depends on the operator's skill and training.⁶ An electric current is passed through a fine gauge needle or flexible probe inserted into the skin, destroying the follicle isthmus and lower follicle.¹ Electrolysis is usually performed on all types of hair, but it is most effective on hairs in the anagen (growth) phase. The process is expensive, time consuming, and repeat treatments are often necessary.⁷ Side effects of electrolysis include pain, erythema, and edema, which are temporary. Other adverse events may be permanent and include scarring, keloid formation in susceptible patients, and post-inflammatory pigment changes.¹



Laser

Laser surgery permits satisfactory treatment of large areas of unwanted excess hair with less discomfort than electrolysis and fewer complications. Laser treatment uses light of certain wavelengths to damage the hair follicles. Laser hair removal is more effective than shaving, waxing, and electrolysis, and produces partial hair reduction for up to six months. Typically, only about 15% of hairs are permanently removed with each laser treatment.⁸ However, the overall effect is enhanced with repeated treatments. The most common areas treated are areas on the face, such as the chin, lip, or sideburns, as well as the neck, chest, abdomen, bikini area, back, arms, legs, and buttocks.⁹ Adverse effects of laser hair removal include pain, erythema, burns, dyspigmentation, and scarring. Laser cooling devices can prevent or minimize some of these effects. Laser treatment has also been known to cause a paradoxical increase in hair growth.¹⁰



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Eflornithine

Eflornithine irreversibly inhibits ornithine decarboxylase, which is an enzyme integral in hair shaft production by the follicle. Currently, eflornithine is the only prescription cream indicated for the removal of unwanted facial hair in women.⁷ In a randomized, double-blind, vehicle-controlled trial, eflornithine reduced facial hair growth significantly compared with placebo vehicle cream within eight weeks of treatment, with at least 70% of women responding favourably.¹¹ Preliminary results from long-term studies are equally promising. After 12 months of treatment, 24% showed marked improvement, and 80% of women showed some level of sustained improvement.¹² Thus, the long-term use of eflornithine in the treatment of unwanted facial hair is clearly efficacious. The most common side effects of eflornithine are relatively mild and include acne, erythema, and burning and stinging of the skin. These symptoms generally resolve without the need for treatment or discontinuation of eflornithine.¹

Conclusion

Unwanted hair growth is a common problem and many patients with unwanted hair seek advice from physicians regarding their treatment options. There are many options for hair removal that differ in efficacy, cost, and patient preference. As a result, family physicians should be well versed in the different treatment options for unwanted hair growth, so they can better educate and guide patients.

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