

SUJATA JOLLY talks about fitting treatment of vellus hair where photo-epilation often fails

nwanted facial hair can cause embarrassment and can lead to anxiety and depression. It can make women feel unfeminine, freakish, self-conscious and depressed. Excessive facial hair can have an impact on confidence in professional and social situations.

Causes of unwanted hair

Excessive hair on the face is a common problem for many people. Around 40% of women will suffer from unwanted hair at some point. Causes include:

- genetic predisposition and ethnicity
- hormones: excessive hair growth due to androgen over-production occurs most commonly with polycystic ovarian syndrome (PCOS)
- side effects of medication for epilepsy, hypoglycaemia, high blood pressure, endometriosis
- anti-ageing supplements containing DHEA
- · reaction to chemotherapy

Types of unwanted hair

There are three types of unwanted hair found in adults—hormonal,

terminal and vellus. Hormonal hair growth usually occurs due to elevated androgen levels; this may be from medication, menopause or HRT. Terminal hairs develop from vellus hair during puberty and are thick, long and dark. Vellus hair is mainly short, fine, light or translucent with low density of melanin, and unlike terminal hair, vellus hairs are not affected by hormones. Generally, vellus hairs are located at the upper dermal level of the skin and are not associated with sebaceous glands.

Typically, vellus hair or "peach fuzz" is evident on most women's face and neck.

Hair removal considerations

At present, the most popular method of treating unwanted hair is photo-epilation—laser and IPL. Both need a conduit for the energy—this is the melanin within the hair. However, vellus hair presents two major issues:

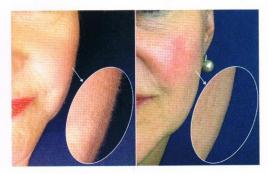
- there is little or no melanin in light coloured hair
- there is a lack of density of melanin in darker hair

Dark hair has a much thicker cortex with abundant melanin, i.e.

dense pigment, whereas lighter hair has a thinner cortex with relatively little or no melanin. Whilst it is accepted that blonde, white, grey and red hair cannot be treated successfully with photo-epilation, it has also been observed that dark vellus hair is also less likely to respond due to lack of density of pigment. For example, a client with Fitzpatrick skin type IV - VI will usually find laser and IPL treatments relatively unsuccessful on vellus hair; this is because the systems have difficulty differentiating hair colour from skin tone.

Paradoxical hypertrichosis

Paradoxical hypertrichosis was first described by Moreno-Arias et al in 2002, but the aesthetic industry Before and immediately following the treatment—all vellus hair is removed leaving the skin completely hair free, smooth and radiant





Hair V Go case study

At the FACE Conference 2015, I demonstrated the Hair V Go treatment on Nel—a typical polycystic ovary syndrome (PCOS) patient. One in five women suffer from PCOS and makes up a large proportion of the hair removal market. Nel is a typical example of someone who had unsuccessfully tried a variety hair removal methods. She told the audience "By 12 years old, I had a beard like a man. As soon as lasers were legal in South Africa, I started using them and then did this for a couple of years. Then I had electrolysis on my chin and it did reduce a lot of thicker hair."

Nel has had epic journey of various hair removal treatments and whilst we can address the hormonal issue on the chin with electrolysis or laser, these treatments have limited success for blonde and vellus (peach fuzz) hair.

is only just beginning to take talk about it. Paradoxical hypertrichosis manifests itself in two ways - either the hair being treated gets stronger, or hair growth is stimulated in an adjacent untreated area.

Published data of patients with normal hair growth who underwent photo-epilation treatments observed that after five sessions hair growth became stronger and thicker. Reported figures have shown that only 10% of patients have experienced the paradoxical hair growth, but my experience and anecdotal evidence from practitioners and other experts in the industry suggests it is much closer to 20%. I suspect this is

because paradoxical hypertrichosis is either not recognised or goes unreported.

Alternative treatments

Vellus hair requires a different treatment methodology. My research led to the conclusion that the most effective way to treat vellus hair is to use a high-pH formulation.

My development, Hair V Go, works using a pH between 12.2-12.4 which breaks down the bonds that hold the hairs' cells together. It works by dissolving the lipid bonds across the hair shaft and going down into the hair shaft. So it works in two ways meaning that you will get penetration across the hair shaft and down the hair follicle.

By travelling down the follicle, the formulation begins to disable the stem cells within the bulge. These stem cells are responsible for creating the hair follicle and regenerate not only the follicle but also the epithelial layer. Therefore, unless we can disable or destroy the stem cells, hair will continue to grow. Hair V Go progressively disables stem cells within the bulge which reduces their activity, hence hair reduction is achieved.

Treatment Protocol

As we are using an alkaline formulation it is essential the acid mantle of the skin is not disrupted prior to treatment; this means that the skin should not be cleansed even if the client is wearing makeup. For this reason, I have adopted a belt and braces approach in order to leave the practitioner with no worries or concerns.

Step one: application of paste mixed from Hair V Go Treatment Powder and Activator Solution. This breaks down the lipid bonds in the hair and is left untouched for 8 to 10 minutes.

Step two: wash off all traces of

the paste and cleanse with pH Reset Cleanser.

Step three: reinstate skin's barrier function with application of Acid Mantle Mist.

Step four: the treatment is finished with a specially formulated Hair V Go Hair Reduction Treatment Cream which contains a mixture of key botanical hair growth inhibitors, including gymnemic acids, which further helps to slow down hair growth. Post-treatment aftercare includes the same hair reduction treatment cream to be used by the client for the next seven days.

I recommend that treatments are initially carried out every three weeks. Then, as hair growth decreases the period between treatments is increased to four weeks, five weeks and so on. Eventually the client will require just three or four management sessions a year.

Sujata Jolly, founder and medical director of UK-based Clinogen Laboratories, has 46 years experience in scientific research and development. She is renowned for being on the cutting edge of R&D and specialises in medical aesthetic treatments using oxygen therapy for treating skin disorders and advanced hair removal. Her latest work includes advanced wound healing and scar reduction.

References

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