

# PERMANENT HAIR REMOVAL: Fact vs. Fiction (part II)



In the previous issue of Vitality we put a number of ‘permanent’ hair removal technologies under the microscope, including electrolysis, Laser and IPL. In the second and final part of this feature we look at how the Tweezer Method; Ultrasound technology; Transdermal Techniques; Microwave; Photoepilator and Oral Medications measure up.

## The Tweezer Method

This method, first patented in 1959, passes an electric current through tweezers, which grasp the hair on the surface of the skin. Electricity enters through the hair to its root and ‘permanently’ damages it.

Although the U.S. Federal Trade Commission Order barred electric tweezers in 1985, a loophole remained regarding DC tweezers. The scientific community has doubts because hair is a poor conductor of electricity and therefore believes it merely dissipates on the skin, rather than passing through the hair.

Any product, claiming to remove hair permanently simply by treating the problem on the surface of the skin, without entering the hair follicle, is questionable and has potential to damage the skin. Electrolysis is different because a needle is inserted directly into the hair follicle below the surface of the skin to the dermal papilla, then the current is targeted exactly where it is needed for the optimum success rate.

## Transcutaneous & Transdermal Techniques

Following the barring of AC tweezers some modifications were made. The electric tweezers were replaced by an electrified cotton swab/adhesive patch and called transdermal electrolysis. This uses direct current (DC) passed through a conductive gel on the surface of the skin for transdermal delivery without the use of a needle. To date, no clinical data is available to support the claims made by the manufacturers.

## Ultrasound Technology

These systems claim that ultrasound waves are channelled precisely down the hair shaft and in the process transform to thermal energy, which then super heats the hair growth areas and inhibits regrowth. It states the waves are bound to the hair shaft and do not dissipate into the skin, and its marketing suggests ‘total hair removal’. It reports on a

total of only 46 test subjects, ten of whom reported benefits including hair reduction, slowing of hair growth and finer hair. Further test results, documented on 36 men and women for a period of several months, were evaluated by Professor Kassuto who concluded that the efficacy is similar to the top commercial light based systems.

Some machines offer the option of a needle probe which, according to the manufacturer, delivers an additional boost of sound energy to remove the stubborn hair. One ultrasonic hair removal device has applied to the FDA but no results are available to date.

## Microwave Technology

The safety and effectiveness of microwave technologies has not been proven scientifically. Microwaves are radio waves with a short frequency range. The indiscriminate heating is its biggest drawback and the reason the FDA has cleared it for body use only.


## Photoepilator

Launched in 1969, this was developed from laser hair removal research. After a chequered start, the FDA finally issued clearance to one company in 1999 for manufacture and marketing. Photoepilators use a burst of filtered light aimed at individual hairs which are then tweezed. The method is comparatively slow and time-consuming and there is no clinical data published, to date, to support any of the permanency claims.

## Oral Medications

Some retarding hair growth medicines are found to be effective, for example Spironolactone and Flutamide. Although some can have serious side effects.

Vaniqa is an FDA approved prescription only topical cream which claims to help reduce unwanted hair growth. The best results are demonstrated when used in conjunction with Laser, IPL or electrolysis.

*Vitality Magazine would like to thank Elaine Stoddart, [www.sterex.com](http://www.sterex.com) for this contribution. *

As a therapist or consumer, tempted to try or buy into some of these methods of hair removal, thoroughly research and carefully consider any new, exciting or ‘next generation’ device. It is very easy to be seduced by sexy images, clever technical jargon and white coats. If a hair removal method makes promises that seem too good to be true...they probably are!