

Advanced electrolysis techniques

Elaine Stoddart, director of training for Sterex Electrolysis International, provides an introduction to advanced electrolysis techniques for minor skin conditions

In 1875 the first treatment using electrolysis was recorded in the medical publication *The Lancet* for the treatment of trichiasis (ingrowing eyelashes). Since then, further developments have established its position as a successful and popular treatment

for permanent hair removal. Advanced techniques were then developed for the treatment of minor skin conditions and imperfections, including telangiectasia, (thread veins), Campbell de Morgans (cherry spots), spider naevi, skin tags and milia.

Advanced electrolysis is considered a relatively new development but the book *Electricity in Facial Blemishes* by Plym S Hayes, MD, the late professor of chemistry and toxicology at the Chicago College of Pharmacy, published in 1910 suggested that the techniques have been around almost as long as electrolysis hair removal.

The benefits of offering advanced electrolysis

Beauty therapists and electrologists train in advanced electrolysis to expand their portfolio with these versatile and effective skills, attract new business and meet the needs of existing clients. Due to recent NHS financial restrictions on 'cosmetic' treatments, consumers are actively seeking professional practitioners other than doctors and nurses who are qualified to perform these treatments safely and at a reasonable price. Beauty therapists and electrologists are benefiting from this gap in the market and offering the client a professional solution to these skin conditions.

Clients are often unaware that conditions such as telangiectasia, milia and skin tags can be quickly and easily removed using electrolysis. The beauty therapist can tactfully suggest electrolysis if any of these treatable conditions are noticed during a facial or body treatment, or the client

Facial thread veins

Facial thread veins, or telangiectasia, are permanently dilated capillaries – not broken capillaries as many people tend to believe. The very thin walls (just one cell thick) of the fine facial capillaries dilate and constrict constantly to regulate our body temperature. As we age, they lose their elasticity and the ability to constrict, often becoming permanently dilated and visible through the skin. Their visibility is often exacerbated by the breakdown of the skin's supporting network of collagen and elastin and the thinning of the skin as we age.

Causes

There are a number of possible causes of telangiectasia including ageing, smoking, alcohol consumption, hereditary and genetic factors, hormones, and pregnancy. Others potential causes may include energetic sports, temperature extremes and excessive exposure to harsh weather, skin fragility, and even constipation. It is usually a combination of factors that increase the risk of developing facial thread veins or potentially exacerbating an existing problem.

Although not considered a cause of telangiectasia, rosacea (as well as the medication for it) may be a related factor, and the two conditions often present simultaneously. Reducing the appearance of the blood vessels using electrolysis may initially trigger rosacea and the client should be made aware of this



Left: Before treatment for thread veins Right: After successful treatment with electrolysis

potential reaction. However, this is relatively rare and a temporary consequence of the long-term positive results.

The client may feel embarrassed as telangiectasia can be prematurely ageing, resemble the appearance of 'blushing' and is often associated – usually incorrectly – with the stigma of alcoholism. Although alcohol can be a contributory factor, as facial flushing may cause damage to the capillaries, spicy food can also cause similar effects.

Who is typically affected?

Ethnicity, genetics and hereditary factors can influence the development of vascular blemishes and disorders. Telangiectasia is a common feature of the fine, maturing 'English rose' complexion, and it may also accompany pregnancy, due to hormonal fluctuations and an

increased blood supply around the body.

What does treatment typically involve?

A course of advanced electrolysis is often advised for telangiectasia so that treatments can be spaced out to prevent skin damage or hyperpigmentation. Both diathermy and blend methods can be used, but the latter is only taught by a few specialists in this field. Diathermy is more commonly used. It involves a very accurate positioning of the probe over the blood vessel and a gentle tap that applies current to the skin's surface. This causes that tiny section of vessel to immediately disappear. Although the quick technique allows a number of small vessels to be treated in a small amount of time, care must be taken not to over-treat and sessions are usually 15 minutes per cheek.

expresses concern during a consultation for other treatments.

Advanced electrolysis treatments can be a lucrative business opportunity for beauty therapists, as the – often instantly – visible results help to instil confidence in clients and influence word-of-mouth recommendations, as well as encourage repeat business where necessary, for example in age-related conditions requiring ongoing treatment. A fully qualified and insured advanced electrolysis practitioner is a valuable asset to any business as the profit

ratio per treatment is high. Treatment prices are generally determined by the length of time the client is treated. Typical prices may be £35 for 15 minutes, and £60 to £65 for 30 minutes. Once the initial equipment has been bought, treatment costs generally involve an electrolysis probe (approximately 32p), steriliser for the skin, aftercare products and minor items, such as cotton wool and couch roll.

Three of the most popular advanced electrolysis treatments are explained over these pages.

Skin tags

Derived from epithelial cells, skin tags are a common skin condition that can appear anywhere on the body but are most frequently found on the neck and face, or in areas of friction, such as the armpit, under the breasts and groin. Skin tags, or acrochordon, are composed of loose fibrous tissue, forming single or multiple distributions that are often hyperpigmented. They appear with a neck like a mushroom and vary in size – from smaller than a grain of uncooked rice to the size of a large pea – or even larger. They are mostly harmless, but practitioners should be aware that any irregular skin growths that are larger, bleed, change shape or appearance, or have an unusual presentation of any kind, require GP referral.

Causes

Skin tags are considered viral in nature and while not infectious they do seem to spread on individuals. They are a benign condition and do not appear to be directly associated with any other major medical conditions. Heredity may be a related factor, and ongoing discussions about whether they originate from the Human Papilloma Virus (HPV) continue. Skin friction and rubbing/chafing of skin seems to cause proliferation. Skin tags appear more frequently in pregnant women, therefore hormone elevations may be a related factor.

Who is typically affected?

Skin tags are extremely common and thought to affect more than half of the population at some point in their lives. Tags are generally acquired, and although small children may develop them in the underarm and neck area, they are much more common in the middle-aged and elderly, tending to increase in prevalence up to the age of 60. Men and women are equally prone to skin tags, and they are more common in overweight people, or women with larger breasts, due to the friction/chafing.

What does treatment typically involve?

Skin tags that cause irritation or are cosmetically unappealing may be removed safely, easily and effectively using electrolysis.



Clockwise from top left: The stages of skin tag removal using tweezers for support – quick and effective

Courses of treatment are rare for skin tags unless the client has an inordinate amount.

There are three different methods of skin tag removal for different types of tags and location:

- For treatment of tags between the eyelashes, or for tiny tags around the neck or under the arms, the probe is gently rested on the skin tag and the current released. The heat generated causes the tag to stick to the probe and then just lifts off as if being melted from the skin. When performed correctly this method takes only seconds per tag removal.
- When the location of the tag renders treatment difficult, another method involves insertion of the probe and then the application of current for a number of seconds to cut off the blood supply, which results in the tag immediately shrivelling and eventually (a day or two later) being sloughed off.
- A third method involves supporting the tag with tweezers and using the very tip of the probe to continually tap away at the neck of the tag, which results in the immediate removal of the skin tag. Treatment is very fast and effective, taking only seconds depending on the size of the skin tag. The procedure is only a little uncomfortable and some clients experience no discomfort.

Milia

Milia are tiny, white, lipid-epithelium plugs, which contain lamellated keratin deposits and often present as hard, solid lumps that lie in the superficial papillary dermis. They are a retention of keratin and sebaceous material within the pilosebaceous duct, eccrine sweat duct, or sebaceous collar surrounding vellus hair.

Causes

The cause of milia is unknown and the reason why some people suffer from them while others do not is not fully understood. Related factors may include a high-cholesterol diet, excessive Vitamin C intake, genetics, and excessively rich moisturisers. Dry, dehydrated skin, which can be acidic, may be more prone to the condition. Milia are often seen simultaneously with telangiectasia.

Who is typically affected ?

Milia can potentially affect anyone regardless of age, ethnicity, or sex. Milia are very common in newborn babies (occurring in up to 50 per cent of them), considered almost normal and are often referred to as milk spots. Milia are typically white to yellow in colour, with bumps forming in a dome-like shape. They tend not to be painful or itchy.

What does treatment typically involve?

Milia can be treated safely and effectively with advanced electrolysis, even on delicate areas. The tip of the probe is gently inserted into the milia several times (depending on the size) and the heat breaks up the hard, keratinised centre, which is absorbed into the body over the next few days. It takes only minutes to desiccate several milia, and repeat treatment is not generally required.

Advanced electrolysis to treat thread veins, skin tags and milia is covered by the FHT for membership and insurance purposes with relevant prerequisites. An additional insurance premium applies.



Elaine Stoddart is director of education and PR for Sterex Electrolysis International Limited. She has many years' experience within the beauty industry as a therapist, salon owner and lecturer. Elaine is co-author of two Level 3 Beauty Therapy books, and is both a highly respected international speaker and trainer in electrolysis and advanced electrolysis/cosmetic procedures. For further information about electrolysis, visit www.sterex.com email info@sterex.com or call 0121 708 2404.