Clinical Studies of Ellipse Applicator
Show Long-Term Hair Removal Results

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Congenital melanocytic nevi with hypertrichosis before Tx

Congenital melanocytic nevi with hypertrichosis after I²PL Tx
Photos courtesy of Agneta Troilius, M.D., Ph.D.

Hair removal on patient with PCOS before Tx

Hair removal on patient with PCOS after I²PL Tx
Photos courtesy of Peter Bjerring, M.D., Ph.D.

Hair removal treatments can be time consuming and fraught with complications should the wrong energy settings be chosen for a given patient. Ellipse IPL systems are now equipped with a more versatile HR-L applicator that can significantly expedite treatments, saving valuable time and potential frustrations for both physicians and patients. Ellipse plans to launch the HR-L applicator at the upcoming *European Academy of Dermatology and Venereology* congress in October 2010.

Featuring a large spot size (18 mm x 48 mm), the HR-L applicator allows physicians to treat larger areas such as the legs, chest or back more quickly; furthermore, it can be used for Fitzpatrick skin types I-V. HR-L treatment also uses Ellipse's renowned dual mode filtering. A 600 nm cut off filter removes shorter wavelengths that would otherwise be absorbed in competing chromophores. A special water filtering system eliminates wavelengths above 950 nm which are mainly absorbed by water and would cause unspecified heating of the skin.

"There is no chromophore existing in hair and skin other than melanin that strongly absorbs the filtered 600 nm - 950 nm waveband. Accordingly, there is high clinical efficiency using lower energy, which can translate into a safer procedure with fewer side effects," explained Professor Peter Bjerring, M.D., Ph.D., head of the department of dermatology at Molholm Hospital in Vejle, Denmark.

Ellipse's state-of-the-art square pulse technology and advanced electronics are designed to ensure that fluence and pulse length are independent of one another. The clinician simply needs to input the skin type, degree of suntan, as well as target size, and the system will automatically recommend the appropriate energy and pulse time for each individual patient.

The new HR-L applicator is built upon the proven successes of Ellipse's established applicator series including the HR-3 (10 mm x 48 mm) and HR-S (8 mm diameter). Like its predecessors, the HR-L features a high reflector efficacy and built-in communication electronics enabling calibration of light output. There is also a companion applicator – the HR-D – featuring a modified waveband of 645 nm - 950 nm for treatment of skin types III-VI.

"I am still very satisfied with our hair removal results after more than 12 years, even with the difficult cases we see in the hospital," said Agneta Troilius, M.D., Ph.D., head of the laser and vascular anomaly section, department of dermatology at Skåne University Hospital in Malmö, Sweden.

By working with leading dermatologists in the design stage, Ellipse was able to thoroughly scrutinize the ergonomics of a treatment, as well as the engineering. The handpieces are not only ergonomically designed for extreme comfort, but physicians can appreciate the unique design of the applicator in the facilitation and high accuracy of shots fired. The new HR-L applicator takes this one step further, as it is one-third lighter with more flexible cabling, minimizing operator strain.

"Initial results from a long-term follow-up study of patients treated for hair removal show that Ellipse's device is equally efficient and effective as leading laser epilation devices with up to 77% percent of hair still removed after ten years," Dr. Bjerring reported. "The HR-L applicator appears to be one of the best hair removal applicators in the top segment of the market."