



Single Treatment of Seborrheic Keratosis, Ephelides and Hyperpigmentation with Combination of Nd:YAG and Er:YAG Laser

Wong Yeut Sun, MD

Parameters used in clinical case:

Lasers	TimeWalker	StarWalker MaQX	StarWalker MaQX
	Step 1	Step 2	Step 3
Wavelength	2940 nm	1064 nm	1064 nm
Handpiece	R11	FS20A	R28d
Fluence	3 J/cm ²	30 mJ/px	2 J/cm ²
Mode	MSP	MaQX-10	MaQX-1
Spot size	2 mm	9x9 mm	7 mm
Frequency	1 Hz	1 Hz	10 Hz
Passes	Multiple pass on lesions	1 pass	Multiple passes
Endpoint	Flattening of lesion	Erythematous/Petechiae	Mild erythematous
Anesthesia	EMLA	Cool air	Cool air
Target	Seborrheic keratosis, ephelides	Whole face	Hyperpigmentation
Sessions	1 session		



Dr. Wong Yeut Sun completed his medical training at the National Defense Medical Center in Taipei, Taiwan in 2011. From 2011 to 2013 he performed internships in the Dermatology Department of Tainan ChiMei Hospital and the Plastic Surgery Dept. of Taipei Veteran General Hospital. After working as a Medical Officer at the Sungai Buloh and Tawau hospitals, he began his current position in 2017 as an aesthetic physician in the Davinci Clinic at the National Taiwan University Hospital in Taipei.

CLINICAL CASE:

This was a 36-year-old female with Fitzpatrick skin type IV who presented with seborrheic keratosis, ephelides and hyperpigmentation. She is an outdoor enthusiast who spends most of her leisure time hiking and cycling. She was looking for something to get rid of spots and marks on her face, but lightening her skin tone was not her priority. The first step of treatment was to target the seborrheic keratosis with the TimeWalker, using Er:YAG laser with the R11 handpiece, spot size 2 mm, and fluence of 3 J/cm². Anticipating the pain during this procedure, EMLA was applied to the area of interest prior to laser treatment. The second step of the treatment was done on the whole face with StarWalker, using Nd:YAG laser with the FS20A handpiece, spot size 9x9 mm, fluence of 30 mJ/px and 1 pass. The endpoint of erythematous changes or petechiae was noticed. Cool air was used during the procedure and the patient reported the pain was bearable. The last step was to target the hyperpigmentation with MaQX-1 mode, spot size 7 mm, and fluence of 2 J/cm² with multiple passes. Cool air was used during this step to mitigate the pain from the laser. Moisturizer and sunscreen were applied to the patient after treatment. Advice for the patient was to avoid long periods / extreme sun exposure. Post-laser care was given to the patient with emphasis on sun protection given the patient's hobbies. The patient came back for follow-up after 1 month and was satisfied with the results. No complications were observed.

Before



1 month after the single session



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