



Correcting Overfilled Fat Grafting with Combination of Nd:YAG and Er:YAG Laser

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Introduction:

This was a 40-year-old female who came to the clinic with a history of fat grafting to her face (twice, 3 years ago). She was not satisfied with the result. The amount of grafted fat made her face look overfilled and unnatural. She was advised to go for liposuction, however, she preferred something non-invasive. In this case, we used the Fotona SP Dynamis to address the overfilled fat.

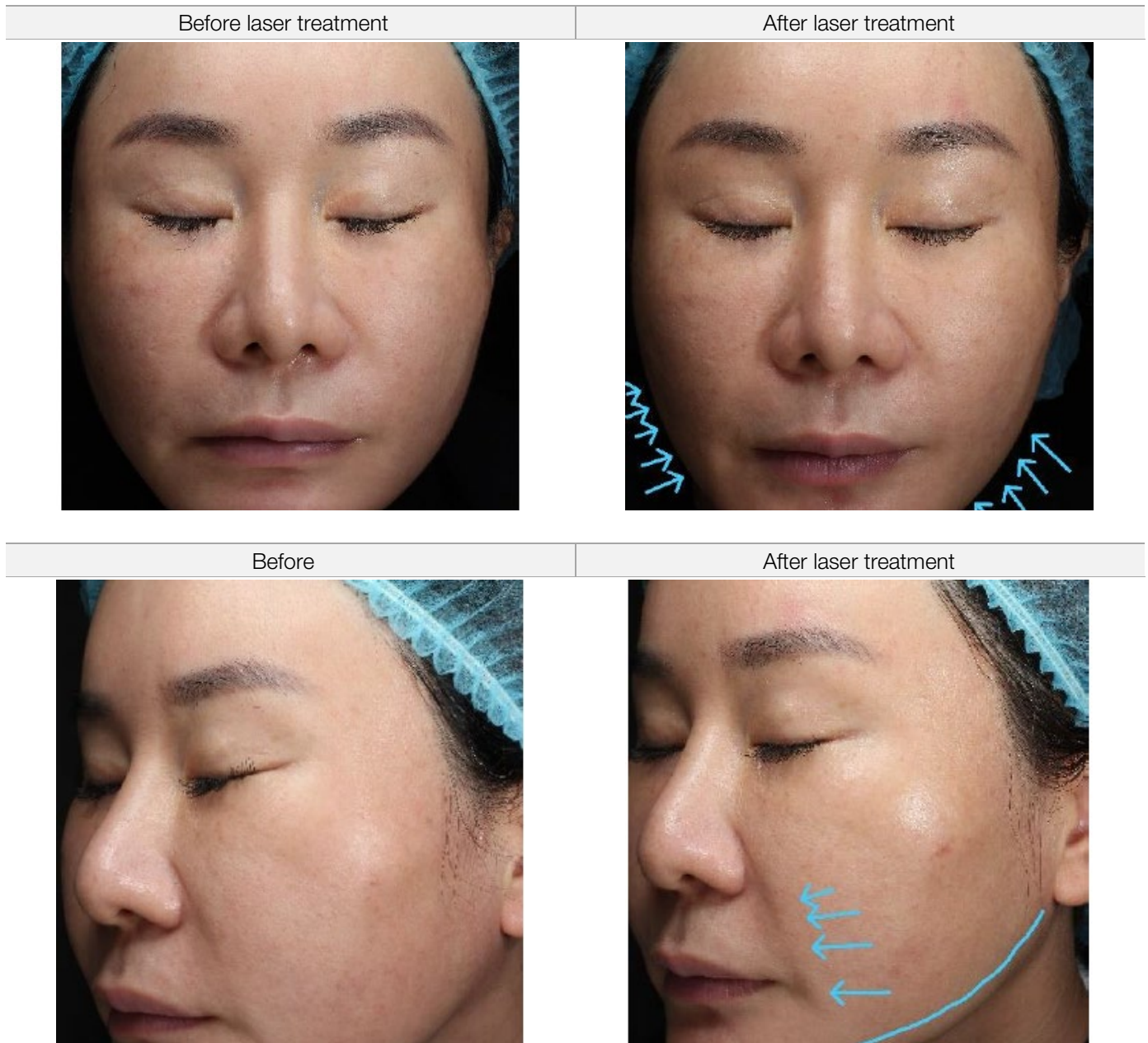
Laser	SP Dynamis			
	Step 1	Step 2	Step 3	Step 4
Wavelength	2940 nm	1064 nm	1064 nm	2940 nm
Handpiece	PS03X	R-33T	R-33T	PS03X
Mode	SMOOTH	FRAC3	PIANO	MSP
Pulse duration	-	0.6 ms	10 s	-
Fluence	9 J/cm ²	25 J/cm ²	350 J/cm ²	1.0 J/cm ²
Spot size	7 mm	6 mm	9 mm	7 mm
Frequency	3 Hz	5 Hz		15 Hz
Passes	4-5 stacks, multiple passes	Multiple passes	Multiple passes	Multiple passes
Endpoint	-	Mild erythema	Mild erythema	White spot
Anesthesia	-	Numbing cream	Numbing cream	Numbing cream
Target	Intraoral	Whole face	Whole face	Whole face
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:

EMLA cream was applied for 40 minutes on the area of interest prior to the treatment. The first step was to target the oral mucosa with Er:YAG, using the PS03X handpiece, with settings as shown in the table. The patient felt a warm sensation and no pain was reported during this step. Drinking water was prepared and given to patient intermittently during this step. The second step was to target the whole face with FRAC3 mode, spot size 4 mm, fluence 25J/cm². Multiple passes were done and the end point was redness. One thing to note during this step was to keep the surface temperature hovering at 40 °C for 3 minutes per area. I split the face into 6 sections: left, right, upper, middle and lower, which helped me to focus on one area with the ideal temperature. The third step worked the similar way by using PIANO mode, spot size 9 mm, fluence 350 J/cm². The treatment duration was 3 minutes per section and the endpoint was mild erythema. Pain was tolerable throughout. The last step was improving skin texture by using Er:YAG laser with the PS03X handpiece. Moisturizer and sunscreen were applied to the patient after treatment. Advice given to the patient was to avoid long periods of / extreme sun exposure. The patient came back for a follow-up after 1 month and was satisfied with the results with only 1 session. No complications were observed. By observing her front view, she had a slimmer face at the temporal region, middle and lateral cheek. From the 45-degree angle view, a smoother jawline was observed, and middle cheek fat was reduced.



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