



Facial Tightening with Combination of Nd:YAG and Er:YAG Lasers

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Introduction:

A 57-year-old female, Fitzpatrick skin type 3, presented to our clinic with skin tightening as her main concern. Her expectation was to improve her marionette line and her jowls as well as her jawline. However, the patient was not keen for injections or surgical intervention. Therefore, the Fotona SP Dynamis was used in this case.

Laser	Fotona SP Dynamis			
	Step 1	Step 2	Step 3	Step 4
Wavelength	Nd:YAG (1064 nm)	Nd:YAG (1064nm)	Er:YAG (2940 nm)	Er:YAG (2940 nm)
Handpiece	R-33T	R-33T	PS03X	PS03X
Mode	PIANO	FRAC3	SMOOTH	MSP
Pulse duration	5.0 sec	0.6 ms	-	-
Spot size	9 mm	6 mm	7 mm	7 mm
Fluence	300 J/cm ²	20-25 J/cm ²	7.5 J/cm ²	1 J/cm ²
Pass	Multiple passes	Multiple passes	5 stacks, multiple passes	Multiple passes
Endpoint	Mild erythematous	Mild erythematous	-	-
Anesthesia	Numbing cream	Numbing cream	-	Numbing cream
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 30 minutes on the area of interest prior to the treatment. The first step was to target the bilateral cheek region with PIANO mode as written in the table. The method used here was to split the face into 6 sections: left, right, upper, middle and lower; the reason was that it helped to maintain the ideal temperature during this step. I kept the temperature during this step hovering at 40 deg. Celsius. The second step was to focus the epidermal and dermal layer to stimulate collagen remodeling with FRAC3. The endpoint was mild erythema. The third step was done intraorally with Er:YAG SMOOTH mode, and the last step was MSP mode for skin texture improvement. The pain was reportedly tolerable throughout the procedure. No other side effects were noted.

Moisturizer and sunscreen were applied to the patient after treatment. Advice given to the patient was to avoid extreme or long periods of sun exposure.

The after pictures were taken after a 2-month interval with just 1 session done. As shown from the before and after picture, the marionette line was reduced significantly bilaterally, and the jawline was smoother. There were no side effects reported.

The patient was quite happy with the result and looked forward to the next session, however, the patient was unable to commit to another session at the time. This case demonstrated that the combination of Nd:YAG and Er:YAG lasers for skin tightening is effective and safe.



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