

Clinical Note

Treatment of ABNOM with PIH using Q-switched Nd:YAG Laser

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Introduction:

A 35-year-old female patient with Fitzpatrick skin type III presented with acquired, bilateral nevus of Ota-like macules (ABNOM) on her cheeks complicated with post-inflammatory hyperpigmentation (PIH) on her malar region as a result of a chemical peel in a beauty parlor one month prior to her clinic visit.

Laser	QX MAX	
	Step 1	Step 2
Wavelength	Q-Switched Nd:YAG (1064 nm)	Q-Switched Nd:YAG(1064 nm)
Handpiece	R28	R28
Fluence	7 J/cm²	2.0 J/ cm ² and 4 J/cm ²
Mode	MaQX-9	FRAC9
Frequency	1 Hz	10 Hz
Passes	1-2 passes on spot	Multiple passes
Spot size	4 mm	7 mm and 4 mm
Endpoint	Petechia	Darkening of pigmentation
Anesthesia	Cool air	Cool air
Sessions	5 sessions at 1 month interval	



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:

The first step of treatment is to target the ABNOM by using a high fluence of the Q-switched mode as shown in the table. With the settings of spot size 4 mm, fluence 7 J/cm², the lesion was treated with 1 to 2 passes. A darkening or fading of the pigment might be observed, and the treatment end point is pin-point bleeding or petechia.

The second step of the treatment is to target PIH on the malar region. Relatively low settings were used for this area: spot size 7 mm, fluence of 2.0 J/cm² and spot size 4 mm, fluence of 4.0 J/cm². Between 2-3 passes were done with the end point being the darkening of the pigmentation.

A cold air blower was used during both steps of treatment. According to the patient, the pain score of the treatment was 3 out of 10 during the first step of treatment and it was painless for the second step. Moisturizer, recovery cream and sunscreen were applied each time after treatment. The patient was advised to avoid extreme or long periods of sun exposure.

A total of 5 treatments at 1 month interval were done. The patient was satisfied with the results after 5 sessions. No complications were observed.





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