Two-Part Treatment of Ota's Nevus

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Introduction:

Nevus of Ota is a benign pigmentation disorder that primarily affects regions of the maxillary and ophthalmic branches of the trigeminal nerve. It is characterized by the presence of blue-gray or slate-colored patches of pigmentation on the face, particularly around the eyes, cheeks, and forehead.

Nevus of Ota is caused by an excess of melanocytes, which are the cells responsible for producing melanin. The condition usually develops during infancy or early childhood and tends to persist throughout life. It is more commonly seen in people of Asian, African, or Hispanic descent, although it can occur in individuals of any ethnic background.

Although Nevus of Ota is generally harmless, it is important to monitor any changes in the pigmented areas, as in rare cases it can develop into a malignant melanoma. In recent years, Q-switched (QS) laser systems have gained popularity in the treatment of Nevus of Ota. These laser systems are effective in lightening the pigmentation associated with Nevus of Ota, producing better outcomes and minimizing scarring compared to traditional treatment methods. Laser therapy with QS lasers selectively targets the excess melanin in the affected areas, breaking it down into smaller particles that are naturally eliminated by the body. This approach offers a non-invasive and relatively safe treatment option for individuals with nevus of Ota.

Laser	Fotona QX MAX	
	Step 1	**Step 2**
Wavelength	Nd:YAG, 1064 nm	Nd:YAG, 1064 nm
Handpiece	R28	R28
Fluence	8.0 – 9.0 J/cm^2	2.4 J/cm^2
Mode	Q-switched	Q-switched
Frequency	2 Hz	10 Hz
Passes	1 pass with 20–30% overlap shots	2–3 passes in brushing technique
Spot size	4 mm	7 mm
Sessions	8 sessions with 3-months interval	10 sessions with 6-weeks interval

Dr. Il Joong Park completed his medical training at the Ulsan University Hospital in Ulsan, South Korea, and obtained a dermatologist's degree at the Asan Medical Center in Seoul, South Korea. He is a dermatologist based in "The Skin Dermatologic Clinic" in Bucheon, South Korea. He is also a regular member of the "Association of Korean Dermatologists" and serves as the educational director of the "Korean Society for Clinical Therapeutic Dermatology".

CLINICAL CASE:

A 57-year-old female patient with skin type IV presented herself with Ota's Nevus, covering most of the right side of the face. The area of the treatment was topically anaesthetized.

The treatment consisted of two parts. The first part included 8 sessions of step-1 parameters (1064 nm, handpiece R28, 8.0 – 9.0 J/cm^2, Q-switched mode, 2 Hz, spot size 4 mm), followed by 10 sessions of step-2 parameters (1064 nm, handpiece R28, 2.4 J/cm^2, Q-switched mode, 10 Hz, spot size 7 mm). In the first part of the treatment the entire lesion was treated with 1 pass of overlapping shots (20–30% overlap). The second part of the treatment included 2–3 passes of brushing at fast speed. The treatment end point was erythema. The only side effect observed was mild petechiae. All together the total treatment period was 3 years.

The level of clearance achieved as assessed by the doctor was 76–100%. The patient rated her satisfaction with the treatment as 'very satisfied'.

Before	After 8 sessions	After final session