



Management of Asian Skin Freckles with Combination of 1064 nm & 532 nm Pico Laser

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Introduction:

Pico lasers have many useful indications when it comes to pigment-related issues. We have conducted a clinical photograph comparison, before & after treatment of an Asian Fitzpatrick skin type IV female patient with freckles on her cheeks, using a combination of 1064 nm & 532 nm settings.

Laser	StarWalker PQX	
	Step 1	Step 2
Wavelength	1064 nm	532 nm
Handpiece	Black	Green
Fluence	1.8 J/cm ²	0.4 J/cm ²
Frequency	5 Hz	2 Hz
Passes	9 passes, 20 shots	Single pass. 1 shot
Spot size	4 mm	4 mm
Stacking	Yes	No
Cooling	Yes	Yes
Sessions	1 session	



Jia Xi Chong received his MBBS degree from Manipal University and MRCS from the Royal College of Surgeons (Ireland). He is a certified medical aesthetic practitioner based in Penang Island, Malaysia, specializing in all types of aesthetic injections, and is an experienced user of Fotona's StarWalker PQX and SP Dynamis laser systems. He actively performs minimally invasive procedures such as double-eyelid creation as well as laser surgeries to improve aesthetic concerns for his patients.

CLINICAL CASE:

In this study, a combination of settings with the StarWalker PQX was used to treat freckles on Fitzpatrick type 4 skin. Two weeks after treatment, the patient was reviewed with clinical photographs to gauge improvements. We found effective lightening of the freckles, with no adverse events such as PIH. Fotona's PQX full-beam Black and Green handpieces were used as per the table. The end point of the 1064 nm treatment was slight erythema of the skin, and mild darkening of the pigmented areas. For 532 nm, gentle frosting was taken as the endpoint. Post-treatment care included regular sunscreen and protection from sun exposure. 2 weeks after the treatment, the patient was reviewed with clinical photographs to gauge for improvements in terms of skin tone and freckles. Lightening of skin tone and freckles was observed over 2 weeks. Effective freckle reduction was achieved with a single session. No complications developed from our combination treatment settings. The patient's satisfaction was good as the downtime was very minimal and highly tolerable, with mild erythema that lasted less than 24 hours, and frosting recovery over 5 days. Both the 1064 nm & 532 nm handpieces can be safely used in combination during the same treatment session with a good margin of safety. More than 1 session may be required for complete resolution of freckles in some patients. However, combining both 1064 nm and 532 nm has proven to reduce the number of sessions needed for clearance of freckles based on the author's experience. More importantly, these parameters appear to be safe in darker skin types, with no adverse reactions such as PIH. The StarWalker PQX Black and Green combination is an effective and minimal downtime treatment for freckles management in Asian skin (FP Type IV), with a low risk of adverse reactions and high patient tolerability.



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