



Hypertrophic port wine stain management with combination of SP Dynamis Nx Line with DMC Cool Mist & StarWalker PQX on Asian skin

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Introduction:

Port Wine Stains are congenital benign vascular lesions, found in 3 to 5 out of every 1,000 neonates. Pulse Dye laser has been traditionally used as the gold standard for PWS. In this study, we have implemented the SP Dynamis NX line VERSA & FRAC 3 with CoolMist™ protocol and conducted a clinical photograph comparison on this Asian Fitzpatrick Skin Type IV patient who had a large hypertrophic Port Wine Stain across the left anterior chest (15cm x 10cm), across 6 months treatment duration. Subject has been treated by yellow laser in other center for 12 sessions prior to seeing me.

Laser	SP Dynamis Nx Line (Treatment 1–3 sessions)			SP Dynamis Nx Line	StarWalker PQX	
	Step 1	Step 2	Step 3	Step 1	Step 2 & Step 3	
Wavelength &MODE	1064 nm VERSA	FRAC3	1064 nm VERSA	1064nm FRAC	1064 nm	
Handpiece	R35-NX	R35-NX	R35-NX	R35-NX	BLACK	
Pulse duration	15 ms	1,6 ms	15 ms	1.6 ms	300 ps	
Fluence	220 J/cm²	200 J/cm²		200 J/cm²	1.6 J/cm²	0.6 J/cm²
Frequency	2 Hz	2 Hz		2 Hz	8 Hz	5 Hz
Passes	1–2 passes	1–2 passes		1–2 passes	1–2 passes	
Spot size	4 mm	4 mm	2 mm	4 mm	4 mm	8 mm
Stacking	No			No	Yes	Yes
Cooling	DMC	DMC	DMC	DMC	no	
Sessions	First 3 sessions			session 4 & session 5		



Dr Jia Xi Chong (Jesse) received his MBBS degree from Manipal University and MRCS from the Royal College of Surgeons (Ireland). He specializes in all types of aesthetic injections with reputable products from renowned international brands, as well as a Key Opinion Leader of top of line StarWalker PQX and SP Dynamis NX Line lasers from Fotona, frequently performing minimally invasive procedures and laser surgeries to improve aesthetic concerns for patients. He actively participates in aesthetic education by providing lectures and hands-on workshops Malaysia & APAC. Dr Jesse's vision is to lead the progress and innovation in aesthetic frontiers to ensure all patients look their best at every age, safely.

CLINICAL CASE:

In this study, a combination of the SP Dynamis Nx Line and Starwalker PQX was employed to treat a large hypertrophic Port Wine Stains (PWS) on the chest over a six-month period. After 5 sessions of VERSA & FRAC 3 combination techniques, adding StarWalker PQX toning from the 4th session, the patient was reviewed with clinical photographs to gauge improvements. FRAC 3 mode is used on red areas, while VERSA mode on dilated telangiectasias. The end point of treatment for the vascular settings were 1) immediate shrinkage of veins & capillaries, 2) mild blanching of pink areas of PWS. Between each treatment, the patient was reviewed with clinical photographs to gauge for improvements in terms of vascular density, intensity of discoloration, and skin texture improvement. The comfort level of each session of treatment based on patient feedback was also recorded. Vascular density was significantly reduced, evenness of skin tone, skin texture improvement was achieved without significant side effects or recurrence of the lesion. Few areas of post-inflammatory hyperpigmentation were seen. Minimal PIH happened in some areas from our laser protocol. Patient satisfaction was good as the downtime was very minimal and highly tolerable-with mild erythema, which lasted less than 24 hours. Fotona SP Dynamis Nx Line VERSA & FRAC3 long pulse modes at a 1064 nm wavelength proved highly effective in targeting hemoglobin chromophores in vascular lesions. Clinical photographs shows obvious and significant closure of telangiectasia and dilated blood vessels between Sep 2023- March 2024, which is sustainable, progressive, and with no sign recurrence. Due to camera lighting calibrations and patient positioning of the anterior chest area, the clinical photographs appear rather unevenly exposed, and hence affected the overall photographic quality in spite of great clinical and patient satisfaction from the Fotona laser treatments.,

