



Treatment of Androgenetic Alopecia with Non-ablative Erbium:YAG Laser

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Introduction:

Androgenetic alopecia is a common aesthetic concern affecting both males and females and is characterized by hair loss in a distinctive, reproducible and progressive pattern from the scalp. Androgenetic hair loss is influenced by genetic factors as well as the effect of local and systemic androgens resulting in miniaturization of hair follicle units from large terminal follicles into smaller vellus-like follicles.

Loss of hair is a major aesthetic concern that compels many individuals to seek various treatment options ranging from topical products to hair salon/spa treatments and even invasive doctor-performed therapies such as hair transplantation. Among topical products, only minoxidil and finasteride are clinically proven to reverse androgenic hair loss and even so, results do vary between individuals. Many doctor-performed treatments, on the other hand, are relatively invasive, time-consuming, may require injections and entail downtime.

Laser	SP Dynamis
	Step 1
Wavelength	2940 nm Er:YAG
Handpiece	PS03
Fluence	7.75 J
Mode	SMOOTH
Frequency	3.3 Hz
Passes	6-8 passes
Spot size	7 mm
Peak surface temperature	39°C
Sessions	3-5 sessions



Dr. Ng Hong Yi graduated from the Yong Loo Lin School of Medicine, National University of Singapore in 2007. He has been an aesthetic practitioner since 2012, performing numerous machine-based treatments as well as injectables such as fillers and botox.

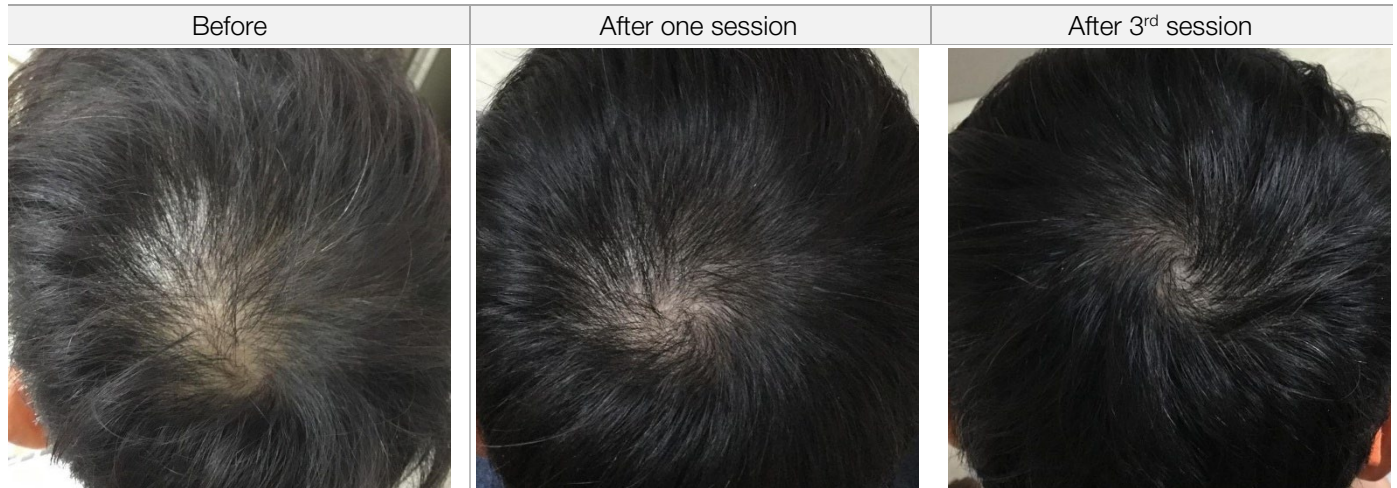
He was previously the Chief Medical Officer and trainer of an international aesthetic chain spanning 5 countries in Asia and was active in educating and training doctors within the group.

He uses the Fotona StarWalker and Dynamis SP in his practice and commonly uses a combination of various laser settings to treat and manage his patient's skin conditions.

CLINICAL CASES:

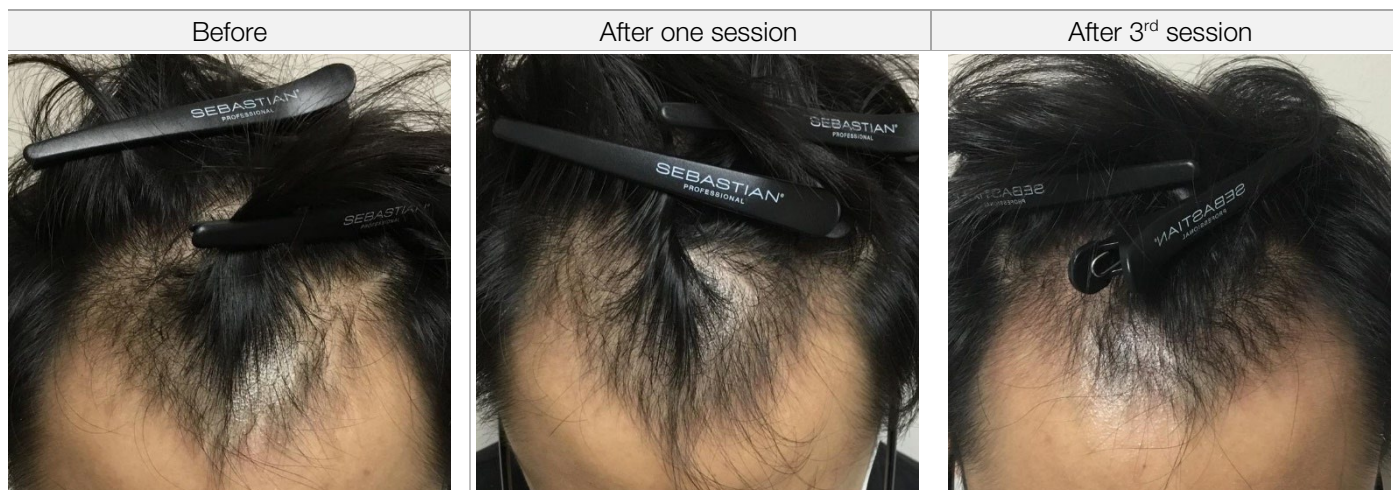
1) A male in his 40s came to me seeking treatment for his hair loss issues. He has been experiencing hair thinning and increased hair fall over the past 2 years and noticed that there was a bald patch appearing on the vertex of his scalp. Before coming to the clinic, he had tried numerous over-the-counter products and hair salon treatments without any improvement. He was only interested in doing non-invasive treatment and was averse to any procedures that would involve injection or needles. He was also not keen on any oral form of medication.

5 sessions of hair laser treatment were planned for him in 3 weekly intervals, but the patient demonstrated remarkable results after just 3 sessions. During each session, hair at the affected area was manually parted by using hair clips, and Er:YAG SMOOTH mode laser was applied directly to the scalp using the above-described settings in a brushing fashion. The procedure did not require any numbing and the patient reported a pain score of 2/10 during the procedure. No post-care was necessary and the patient was instructed to continue his hair washing as normal. No pain or sensitivity of the treated area was noted after the procedure. The patient was evaluated and photographs were taken 3 weeks after each treatment session.



2) A male in his 30's came to me complaining of increased hair fall as well as a progressively receding and increasingly M-shaped hairline. He had no prior treatment or medication for his problem.

5 sessions of hair laser treatment was planned for him at 3 week intervals with photographs taken before each treatment. During each session, hair at the affected area was manually parted by using hair clips, and Er:YAG SMOOTH mode laser was applied directly to the scalp using the above described settings in a brushing fashion. The procedure did not require any numbing and the patient reported a pain score of 1/10 during the procedure. No post-care was necessary and the patient was instructed to continue his hair washing as normal. The patient reported mild flaking of the scalp post treatment but it spontaneously resolved after 4-5 days. No other significant downtime was reported. After 3 sessions, significant regrowth of hair was noted at the hair line with a reversal of hair line recession.



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