



Treatment of Lichen Sclerosus (LS) with Erbium:YAG Laser

Dr. Adrian Gaspar

Introduction:

Lichen sclerosus (LS) is a chronic skin disease characterized by white, flat papules with an erythematous halo and black, hard follicular plugs. In advanced cases, the papules tend to coalesce (blend) into large, white patches of thin, itchy skin. It is a common chronic skin disorder that most often affects genital and perianal areas.

The most common treatment for LS is applying a steroid cream or immunomodulator agents directly to the affected area. Both can be highly effective in symptom control, but the increasing rate of patients who do not respond satisfactorily to these standard treatment options led us to develop a new laser treatment alternative.

Laser	Fotona Er:YAG system			
	Step 1	Step 2	Step 3	Step 4
Wavelength	Er:YAG	Er:YAG	Er:YAG	Er:YAG
Pulse Mode	MSP	XLP	SMOOTH	Basic - SP
Fluence	1.2 J/cm ²	9 J/cm ²	1.5 – 2 J/cm ²	11 J/cm ²
Frequency	4 Hz	5 Hz	1.4 Hz	2 Hz
Handpiece	R11	PS03	PS03	FS01
Spot size	7 mm	7 mm	7 mm	9 x 9
Stacking	No	No	8	No
Passes	3	3	1	1
Overlapping	15%	15%	15%	0%
Cooling	No			
Sessions	2 sessions, 1 per month			
Anesthesia	Topical			



Dr. Adrian Gaspar specialized in gynecology and obstetrics and later obtained a postgraduate degree in aesthetic and anti-aging medicine. His practice is established in Mendoza, Argentina and in Miami, Florida U.S.A. He has been a devoted educator, renowned international speaker and avid researcher in the fields of laser applications in gynecology and aesthetics for the past 15 years. His pioneering contributions in innovative laser treatments have shaped the landscape of current laser applications, having received innumerable awards for these accomplishments.

CLINICAL CASE:

After applying topical anesthesia, Step #1 parameters are applied in order to achieve a thinning of the epidermis. With step #2, we aim to apply extra-long, deep pre-heating pulses that will be followed by a third step that uses smooth mode with 8 stacks and no overlapping. With this phase we produce an improvement in neocollagenesis and neoangiogenesis that will help in reverting the atrophic process of the lesion and its symptoms.

In the 4th and last step, by creating fractional micro-ablative shallow channels of 30-40 microns, we can facilitate the introduction of stimulating nutrients provided by platelet rich plasma, which has been previously extracted from the patient. Alternatively, through these same channels, topical non-cross-linked hyaluronic acid can also be used to increase hydro-retention of the skin.

We also encourage patients to reinforce their post-op with oral supplements such as Vitamin C, E, A and Omega 3 and a nano-hyaluronic gel with vitamin C, initially every night for 2 months and then at least 3 times a week for another 2 months.

Patients should be followed up every 5 months where an additional session can be provided to maintain stimulation if needed.

No complications have been observed with this protocol.

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