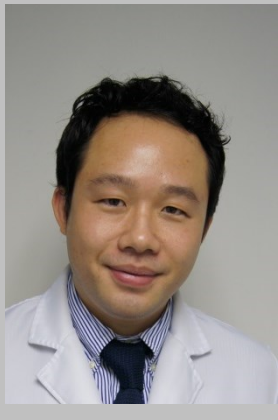


Dr. Au Shui Lun received his Bachelor of medicine and surgery from the Chinese University of Hong Kong followed by a second diploma in Clinical Dermatology and a Master's degree in Aesthetic Plastic Surgery from Queen Mary University of London. He operates his own private cosmetic surgery practice in Hong Kong.



**Clinical Bulletin**

J. LA&HA, Vol. 2013, No. 1; p. CB05.

## Fractional Er:YAG Laser for Scar-Revision Treatments

Dr. Au Shui Lun, Althy

### Parameters:

Laser source:	Er:YAG, 2940 nm
Pulse duration:	LP (600 $\mu$ s)
Fluence:	50-80 J/cm <sup>2</sup>
Frequency:	20 Hz
Handpiece:	F-Runner (fractional scanner)
Density / coverage:	5 %

### Treatment procedure:

This case presents the use of a fractional ablative Er:YAG laser and scanner for scar-revision treatments. A 50-year-old man came to our clinical with a surgical scar over his right upper brow. Five sessions of fractional Erbium laser treatment (once per month) were performed to improve the color, texture and thickness of the scar. An ice pack was applied for 5 minutes before the treatment, and no PIH was observed post-treatment.

When performing scar-revision therapy with the Fotona F-22, we typically use 5% density, 20 Hz and 40 J/cm<sup>2</sup> to 100 J/cm<sup>2</sup> settings. The F-22 scanner delivers precise and accurate fractional treatments (250  $\mu$ m diameter micro-channels) that reach several mm deep into the skin to improve the appearance of scar tissue, such as hypertrophic, keloidal, atrophic and acne scars.

Different treatment modalities may be used, either as a monotherapy or as a combination, such as steroid injection, surgery, and various laser platforms, including conventional ablative, non-ablative and fractional lasers. Fractional resurfacing initiates the body's wound healing response at the targeted site, resulting in the stimulation of fibroblasts to produce new collagen and elastin. Downtime and pain are usually well tolerated by patients, although post-inflammatory hyperpigmentation (PIH) and prolonged erythema are potential side effects that remain a concern when treating Asian skin. Patient education and post treatment use of sunblock and 1% hydrocortisone are encouraged and should be used to maximize cosmetic outcomes.



Published by the Laser and Health Academy. All rights reserved. © 2013

Disclaimer: The intent of this Laser and Health Academy publication is to facilitate an exchange of information on the views, research results, and clinical experiences within the medical laser community. The contents of this publication are the sole responsibility of the authors and may not in any circumstances be regarded as official product information by the medical equipment manufacturers. When in doubt please check with the manufacturers whether a specific product or application has been approved or cleared to be marketed and sold in your country.



Before scar-revision treatment



After 2 treatments



After 5 treatments