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Fractional, ablative er:YAG laser akin for skin resurfacing

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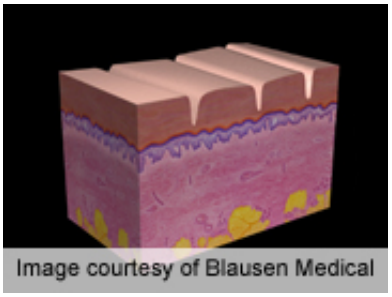

Multiple sessions of fractional laser treatment with erbium:yttrium-aluminum-garnet (Er:YAG) for facial resurfacing are comparable to a single ablative Er:YAG laser treatment, according to a small study published online Oct. 29 in the *Journal of the American Academy of Dermatology*.

(HealthDay)—Multiple sessions of fractional laser treatment with erbium:yttrium-aluminum-garnet (Er:YAG) for facial resurfacing are comparable to a single ablative Er:YAG laser treatment, according to a small study published online Oct. 29 in the *Journal of the American Academy of Dermatology*.

Moetaz El-Domyati, M.D., from Al-Minya University in Cairo, and colleagues performed facial resurfacing with single-session ablative Er:YAG laser on six patients, and fractional Er:YAG laser (four sessions) on another six patients. Skin biopsies were assessed histopathologically and immunohistochemically before resurfacing and at one and six months of follow-up. Skin biopsy specimens were also

quantified for epidermal thickness and neocollagen formation.

The researchers observed increased epidermal thickness with both laser treatments. Increased neocollagen formation was seen in dermal collagen, with increased concentration of collagen types I, III, and VII. Studies of dermal elastic tissue showed decreased dermal elastin, while tropoelastin concentrations increased after laser resurfacing. There were no significant differences between the lasers in their clinical effects or on dermal collagen. For the ablative laser, changes in epidermal thickness, elastin, and tropoelastin were significantly more marked.

"Multiple sessions of fractional laser have comparable effects to a single session of ablative Er:YAG laser on dermal collagen but ablative laser has more effect on elastic tissue and epidermis," the authors write.

More information: Abstract
Full Text (subscription or payment may be required)

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