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Laser Resurfacing of the Neck with the Erbium:YAG Laser

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ABSTRACT

Background. Laser resurfacing of the face is widely used to correct the effects of photoaging. The neck also develops a similar degree of photoaging, but is not usually treated because a higher incidence of adverse effects can occur with laser treatment.

Objective. To present a new method for treating photoaged skin of the neck with an erbium:yttrium aluminum garnet (Er:YAG) laser.

Methods. Twenty patients underwent Er:YAG laser resurfacing of the neck with one of two methods. Method 1 consisted of using the Er:YAG with a 5-mm diameter collimated beam at a fluence of 8.7 J/cm² followed by a second pass using a 0.2 mm diameter non-collimated spot at 1.7 J in a defocused mode with spot sizes ranging from about 5 to 10 mm in diameter (fluences from 2–9 J/cm²). Method 2 consisted of treating the entire neck with a single pass of the Er:YAG laser with a 4 mm diameter non-collimated spot at 1.7 J (fluence of 13.5 J/cm²). A second pass at identical settings was made on the upper half of the neck with a more defocused pass using a 6–10 mm diameter spot (fluence of 2–6 J/cm²) on the lower half of the neck. Patients were evaluated by two nontreating physicians as to overall satisfaction and improvement in skin texture and color.

Results. Overall, 51% of patients were satisfied with their results. Skin texture improved an average of 39%. Method 1 produced a 28% improvement, Method 2 a 48% improvement. Skin color improved an average of 37%. Method 1 produced a 28% improvement, Method 2 a 45% improvement.

Conclusion. Photoaged skin of the neck can be effectively treated with the Er:Yag laser with minimal adverse effects.
