Topical hydration cuts thermal damage with PSR facelift

January 24 2014

Image courtesy of Blausen Medical
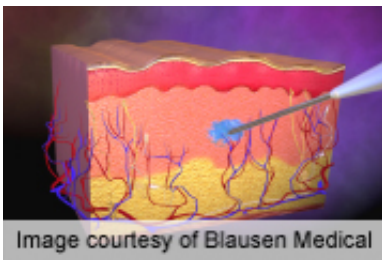
(HealthDay)—Thermal damage resulting from treatment with a plasma skin regeneration (PSR) device is reduced by topical hydration applied to skin for 30 minutes prior to treatment, according to a pilot study published online Dec. 27 in *Lasers in Surgery and Medicine*.

Alicia R. Sanderson, M.D., from University of California in Irvine, and colleagues assessed results from facelifts performed using PSR (1.8 and 3.5 J). PSR was performed after 0, 30, or 60 minutes of topical anesthetic application. Skin was fixed for histologic analysis during the facelift in four patients (two control and four treatment sites per patient).

The researchers observed a significant difference in the average thermal injury score, depth of thermal damage, and epidermal injury when comparing controls to 30 minutes of hydration (P = 0.012, 0.012, 0.017, respectively). Comparison of controls and 60 minutes of hydration did

not yield statistical differences, and there were no differences between 30 and 60 minutes of hydration. The researchers also observed epidermal vacuolization at low energy and patchy distribution of thermal injury.

"The data suggest that application of topical anesthetic for a short period of time prior to treatment with the PSR device is cost-effective, safe, and may be clinically beneficial," the authors write.

This study was sponsored by the Beckman Laser Institute, based in Irvine Calif.

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

Citation: Topical hydration cuts thermal damage with PSR facelift (2014, January 24) retrieved 27 April 2024 from
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