

# Cosmetic Surgery Times®

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April 2003

## Facial-tightening device gives patients alternative to surgery

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**San Diego**—Tightening of facial tissue has been successfully achieved in the first multi-center study of a new nonablative radiofrequency device. According to Richard E. Fitzpatrick, M.D., he and colleagues have duplicated results previously reported only anecdotally.



**Dr. Fitzpatrick**

The device tested by these researchers was the ThermaCool System. Initially, researchers set out to treat crow's feet wrinkles with treatments to the forehead and temple areas. After treatments, wrinkling improved in a majority of patients, and skin tightened in the temple area, as well as in the eyebrow and eyelid areas.

"Many patients don't want the risks, downtime, or looks associated with surgery. This gives them another option to consider," said Dr. Fitzpatrick, associate clinical professor at the University of California at San Diego, and in practice at Dermatology Associates of San Diego County Inc. He said other than some minor redness for a day and soreness for a few days, there are virtually no visible signs of healing after treatment and no post-operative care required.

### Just the right person

An ideal candidate for this skin tightening technique is a person with minimal loose tissue who is a borderline facelift candidate. Such patients could avoid a facelift if they were treated early on with the ThermaCool device with repeat treatments every three to five years, he said.

The device can be used alone or in conjunction with other procedures. For instance,

sun-damaged skin could be tightened, and then treated with a chemical peel or laser procedure to provide even pigmentation. The device can also target areas still loose after a facelift.

**Results prove conclusive.** In the study, 79 women and seven men were treated using the ThermaCool System to tighten tissue and reduce periorbital rhytids. The range of treatment levels was between 140 joules on a 1 cm<sup>2</sup> surface area of skin and 58 joules.

Follow-up four months after treatment revealed 61 percent of treatment areas were significantly improved in Fitzpatrick wrinkling score. Six months after treatment, 80 percent of treated areas had improvements in wrinkling scores of at least 1 point on a 9-point scale.

Researchers noted the improvement pattern is consistent with initial tightening, followed by long-term wound healing.

Five patients had some degree of epidermal interruption in an affected area between 0.4 and 0.9 mm in length.

Brow positions photographed and measured four months after treatment showed 60 percent were measurably elevated, which was quantified as at least 5 mm. After six months, 80 percent were measurably elevated.

Among possible adverse events, Dr. Fitzpatrick said 21 of the 5,858 treatment areas

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— RICHARD E. FITZPATRICK, M.D.

resulted in burned skin, for a burn risk of 0.36 percent. While no scars developed on these burn sites, he cautioned against using higher treatment levels that could produce scarring.

Dr. Fitzpatrick said that compared to nonablative lasers, which react with the upper 200 microns of tissue and result in "subtle improvements in texture," this nonablative radiofrequency device penetrates much deeper — as deep as 5 mm to 6 mm. By delivering heat to the tissue in a controlled manner and allowing the resultant wounds to heal, the cumulative effect is tighter tissue.

"This is quite different from lasers developed to do similar things," he said. "Theoretically, you could use this device to tighten loose skin anywhere," he said. "We've been using it commonly to treat loose skin on cheeks and anterior neck." He and other physicians have started using the device to elevate breasts and to tighten skin in other body areas.

"The fact that we may be able to do this on sagging skin on the buttocks, legs, arms, breasts, or abdomen is exciting," he said. "Those areas aren't suited for surgery, and many surgeries used are so complex and such big surgeries that they're not really desirable." **CST**

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