

Cosmetic Surgery Times

Where the Exchange on Aesthetic Perspective Begins

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occlusive silicone dressing

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Denver — A new silicone wound dressing provides a room with a view — and patients who use it heal faster than those who have had conventional wound care.

That's the finding of a study on the new silicone occlusive dressing (Silon-TSR; Bio Med Sciences, Inc. Bethlehem, Pa.). The data suggest it is more effective at mitigating erythema and a welcome convenience for physicians who want to keep close tabs on postoperative skin, said Richard Ort, M.D., a co-author of the study. (*Arch Dermatol.* 2001;137:1317-21). Other co-authors included R. Sonia Batra, M.D., Kenneth Arndt, M.D., and Jeffrey Dover, M.D., F.R.C.P.C.

"It's like putting a piece of saran wrap on the face. It's clear, you can see right through it, and you can keep an eye on wound healing," said Dr. Ort, assistant clinical professor of dermatology, University of Colorado School of Medicine. Postlaser dressings have become quite a source of debate, he added.

There are compelling reasons for opting for the open-wound alternative. Some physicians feel that use of closed dressings after laser resurfacing can increase the risk for infection, by trapping bacteria under the dressing. Moreover, occlusive dressings can make patients feel a bit "claustrophobic," he said. With the open-wound technique, it is easy to spot signs of infection and it is inexpensive.

dressing group. The duration of swelling significantly diminished, as well. "Overall, there was a dramatic decrease in redness, crusting, and swelling," he said of the silicone-dressing group. Crusting in the closed dressing group was seen only in areas that were uncovered (the silicone dressing tended to slip off the chin, he observed). Even when crusting did occur, it was of substantially shorter duration.

There was no difference in the incidence of infection between the open-wound and closed-dressing groups.

There was no difference in final outcome, he said. Long-term results and complication rates remain unchanged.

However, patients liked the silicone dressing. They made comments about how much they enjoyed seeing their progress in the mirror. And when they had discomfort, it tended to be mild. Was this because they could see the swelling abate and the redness fade under the dressing? Dr. Ort does not discount that possibility, but his observations on the topic would be only anecdotal, he said. Dr. Ort hopes the study will help settle the open-versus-closed debate: He and his co-investigators found that healing was more rapid among patients who had occlusive dressings and crusting was seen only in uncovered areas.

Dr. Ort and his colleagues concluded that occlusive silicone dressing application decreases immediate postoperative morbidity and significantly reduces the severity and duration of erythema, and decreases

the duration of swelling and crusting. There was no greater rate of infection in the occlusive-dressing groups, Dr. Ort added. He cautioned that patients treated with an occlusive dressing should probably be treated with an oral antibiotic to avoid infection.

Other studies, using other laser techniques, have reached the same conclusion. One study on wound care following CO₂ laser resurfacing found that Duoderm worked well for postsurfacing healing (*Derm Surg.* 2000;26(4):341-344). Another study found that closed dressings worked well after laser resurfacing, but overall satisfaction was highest with perforated mesh and polymer dressings (*Derm Surg.* 2000; 26(6):562-571).

In fact, a number of European publications that have compared occlusive dressings with open-wound care have attained similar results: Healing is quicker and patients are happier. The findings have been replicated so many times that occlusive dressings have become the standard of care in some countries outside the United States.

As those studies suggest, the quest for the best occlusive dressings are underway.

Whether the use of occlusive dressings really is better remains open to debate. Just as Dr. Ort suggested, short-term postoperative morbidity is significantly decreased by closed dressings. However, long-term outcomes — in terms of scarring or other measures of a less-than-optimal result — look about the same either way. CST



Dr. Dover



Dr. Ort

In the study, postsurgical healing times were compared after combination carbon dioxide and erbium:YAG full-face laser skin resurfacing. The patients' wounds were treated one of two ways: with traditional open wound care (consisting of frequent soaks and application of Aquaphor ointment) or with the silicone occlusive dressing applied for three days postoperatively. Dr. Ort, who helped evaluate the outcomes, had no financial interest in the new product, he said.

The retrospective part of the study consisted of 35 patients with closed dressings compared with 35 control subjects with open-wound care. The prospective part of the study compared 27 patients using closed dressings with 27 historical controls using the open-wound technique.

Erythema, crusting, swelling, pain, purpura, long-term complications, and dressing comfort were assessed across the groups, he said.

Application of the silicone occlusive dressing decreased the severity and duration of erythema. Erythema resolved in approximately half the time in the closed