Silverlon Dressing Found More Effective, but Costly

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CHICAGO — Skin graft donor site wounds treated with Silverlon dressing healed significantly faster than those treated with standard Xeroform gauze, albeit at a greater cost to the pocketbook.

Silverlon (Argentum Medical, LLC), a silver-impregnated wound dressing widely used in the treatment of partial thickness burns, also provided better initial postoperative and overall pain relief at the donor site than Xeroform (Tyco Health-care Group), according to results of a small, prospective randomized trial.

However, Silverlon was associated with significantly greater daily wound care time by nurses than Xeroform (6 minutes vs. 2 minutes) and significantly higher cost per donor site ($22.99 vs. $0.47), Dr. Michael C. Albrecht and colleagues reported in a poster at the annual meeting of the American Burn Association.

"Because of the frequency of serial excision and grafting procedures in large burns and the necessity of rapid donor site healing while minimizing discomfort to the patient, Silverlon appears to be a superior dressing compared to Xeroform in achieving these goals," Dr. Albrecht and colleagues concluded.

The study included 18 men, mean age 26.6 years, with burns covering an average 8.5% (range 2%-20%) of total body surface area who were admitted to the U.S. Army Institute of Surgical Research (USAISR) burn unit from December 2005 to March 2007. Patients had symmetrically paired donor sites harvested by the same physician, and received both the Xeroform and Silverlon dressings, randomized to each donor site. The average time to wound healing was 10.2 days with Silverlon versus 11.4 days with Xeroform.

Although a single day improvement in wound healing does not sound dramatically different, it is clinically important to patients who require frequent reharvesting of donor sites to achieve complete wound coverage, Dr. Albrecht, a burn surgeon and principal investigator for dressing studies at the USAISR, said in an interview.

Over the previous 3 years at the USAISR, an average of 17% of all excision and grafting procedures required reharvesting of the donor sites.

Pain scores on a 10-point verbal scale were significantly lower with Silverlon than Xeroform on postoperative days 1-3; and were significantly lower overall with Silverlon (2.04 vs. 2.66).

There were no differences with inflammation indices or infection rates between the two dressings. At a mean of 48 days post surgery, scar quality was similar with Silverlon versus Xeroform, as determined by a modified Vancouver Burn Scar Assessment Scale (2.63 vs. 2.31) and by an independent and blinded reviewer using a 14-point scale (6.05 vs. 6.94), said Dr. Albrecht, who reported no conflicts of interest.

Significantly more patients preferred the Silverlon dressing than the Xeroform gauze (64% vs. 23%), while 13% had no preference. Xeroform gauze remains the standard dressing in the USAISR burn unit, said Dr. Albrecht, who suggested that resistance to change, rather than the higher cost of Silverlon, has kept Xeroform on the shelves.

Note: Based on a study of 18 men with burns covering an average 8.5% of total body surface area.

Source: Dr. Albrecht

By the Numbers: Patient Preference for Silverlon

Prefer Silverlon 64%
Prefer Xeroform 23%
No preference 13%

Note: Based on a study of 18 men with burns covering an average 8.5% of total body surface area.
Source: Dr. Albrecht

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