Surgical Treatment of Pressure Ulcers with a Fibrin Sealant in

Patients with Spinal Cord Injury: A Cost-Consequence Analysis.

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Abstract:

BACKGROUND: A comparative study was performed to evaluate the effectiveness and costs of a

fibrin sealant (Tissucol Duo [known as Tisseel in the United States], Baxter International, Deerfield,

Illinois) to improve postoperative outcomes in patients with spinal cord injury undergoing surgical

treatment for pressure ulcers (PrUs).

METHODS: Between January and June 2011, 27 patients underwent surgical treatment for PrUs

with the direct application of Tissucol Duo sprayed before closure. The costs and outcomes obtained

in this cohort were compared with those obtained in a previous retrospective study where 71

patients underwent conventional surgery.

RESULTS: Lower rates of hematoma-seroma were observed in the study group (3.7% vs 33.8%; P

< .05). Drain removal occurred earlier (10 vs 15 days; P < .05), and the average drain volume was

also lower (155 vs 360 mL; P < .05) for this group. The mean length of hospital stay was significantly

lower in the study group and was the main contributing factor to the overall costs.

CONCLUSIONS: The application of Tissucol Duo during surgical treatment of PrUs in patients with

spinal cord injury has been shown to be effective in reducing postoperative complications and in

shortening the duration of the hospital stay with a consequent savings in costs.