

# Silver Nylon Wound Dressings are Associated with Decreased Post-Operative Pain

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**Purpose:** Silver nylon dressings were recently studied at our institution to assess their utility in decreasing surgical site infections in colorectal surgery patients. Subsequently, we observed that the patients with the silver nylon dressings appeared to be in less pain as well. We set out to compare the pain scores reported by the patients who participated in the silver nylon dressing trial and to evaluate the possible economic impact of the postoperative pain associated with silver nylon dressings and traditional wound dressings.

**Materials and methods:** We evaluated the self-reported pain of the patients who participated in the prospective, randomized, controlled trial using silver nylon wound dressings. Each day the patients' level of pain was assessed and recorded. These scores were arranged in a data table with both morning and evening scores for each postoperative inpatient day and outpatient scores were reported at 7 and 30 day post discharge visits. A 0 to 10 pain scale was used with 0 being no pain and 10 being the worst pain imaginable.

**Results:** A total of 110 patients were enrolled in this study from July 2009 to April 2010. There were 54 patients in the control group and 56 patients in the silver nylon dressing group. The difference in pain scores for patients in the silver nylon group and the control group reached statistical significance postoperative day 0 through 7 with the silver nylon patients reported less severe pain. This resulted in a trend toward a difference cost of pain medication used between the two groups, the median cost of pain medication for the silver nylon group was \$112.09 and the control group was \$201.41

**Conclusion:** There was a statistically significant decrease in the postoperative pain experienced by patients whose wounds were dressed with silver nylon dressings. This resulted in decreased pain medication used and trended toward subsequent lower cost for pain medications.

**Mean Post-Op Pain Scores - Day 0 to Day 7**

