



Evaluation of a Silver Collagen based Amorphous Gel for the Use of Treatment of a Dehisced Abdominal Wound Post Ventral Hernia Repair

Presented by: Mary Lee Reard, LPN, WCC and Diane Heasley, RN, MSN, MEd, CWCN, WCC, DAPWCA in conjunction with Lafayette Manor, Uniontown, PA



Introduction: Wound dehiscence post surgery is a common and unwelcome complication. In hernia repairs, the area is already weakened by the striation of muscles and even with mesh placement, the area tends to be very fragile. In a patient with obesity, the odds of occurrence rapidly rise. Traditionally, wet to dry dressings in addition to retention sutures are used to heal these types of wounds. This study takes a look at the use of a silver based group I bovine collagen based amorphous gel in the hopes of expediting cellular matrix and thus healing.

Methods: A seventy year old Caucasian female with a history of trauma and post abdominal surgery ventral hernia, as well as diabetes, DVT, hypotension, dehydration and renal failure was admitted to skilled care on 7/23/08 to be followed for wound care and reconditioning. Her hernia, per notes, had been incarcerated on 7/10/08 and her surgeon was concerned that because of a "skin only closure" method being used, her bowels on admission were lying directly beneath the sutured area and were at a greater risk for dehiscence. On 8/20/08, her incision started to separate and 24 blue heavy gauge sutures became visible along with a base of 80% moist stringy yellow and brown slough. Selective chemical debridement was once a day for one week and on 9/8/08, the use of a silver collagen based gel was initiated. The wound was cleansed gently with sterile water and pat dried. The silver collagen amorphous gel was applied in a thin layer with a cotton tipped applicator and covered with an ionic silver based contact dressing followed by a dry dressing and her abdominal binder. At the time of initiation, the base of the wound had approximately 20% yellow and brown slough. The dressing was done every third day. Visually, at the time of initiation, there was very little granulation budding noted.

Results: On 9/15/08, all but 5% of yellow slough was gone. The wound started to take on a granular appearance. On 9/23/08, the wound was covered in granulation budding. On 10/7/08, the wound margins are starting to retract with evidence of epithelialization beginning from the edges. On 10/14/08, epithelial cells were starting to be noticed scattered throughout the wound base with retraction continuing. On 10/20/08, the wound continues to heal expediently with granulation and retraction from the edges. Once thought to be in need of grafting, the patient per the surgeon, may not need one at all.





Conclusion: The silver collagen based amorphous gel in conjunction with the use of the ionic silver contact layer efficiently and expediently helped the wound granulate and retract.

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