Use of a Novel Silicone Backed Fabric (NSBF) to Reduce Peri-Wound Incision Tension and Support Healing of Complex Wounds

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Introduction

Incision separation and dehiscence can be caused by tension on adjacent tissues. Body location, habitus and tissue mobility are contributing factors. The incision separation causes pain and delays healing. Caring for patients who have had surgeries such as complex abdominal reconstruction, abdominal perineal resection and pilonidal cyst debridement can be challenging because incisions in these areas are prone to separation.

Methods

The NSBF* backing is easily removed exposing the tacky silicone surface. Uses included securing dressings such as alginates, foams & gauze, elimination of tension on incisions, and protection of newly-healed areas from external friction/shear. Application replaced use of tape.

Results

We have used NSBF* on a total of 85 patients to date. Our population included patients who had colo-rectal surgery, general surgery, orthopedic surgery, and podiatry. Our poster included the outcomes of 4 different applications.

For patients who were at risk of incision separation, the elimination of tension allowed for uninterrupted healing.

For patients whose incisions had separated, we achieved more rapid healing by applying wound care principles and eliminating tension.

For our SCI patients, we applied small patches of NSBF* to newly healed pelvic wounds which eliminated friction/shear forces that were causing superficial injuries. We also identified cost saving benefits because the product was washable, could be worn for several weeks and replaced the expense of tape used to secure dressings.

Discussion

We have had no injuries to even fragile skin when this product was removed & replaced multiple times. NSBF* was safely applied to peri-incision skin to prevent incision separation, support the healing of complex wounds when incisions dehisced and dressing changes were required, and protected newly healed areas where friction/shear caused superficial injuries. Patients appreciated the increased comfort when tension was eliminated from incisions, they could shower with the NSBF* on because it is hydrophobic.

Case 1:

Pilonidal Cyst
or Abdominal
Perineal
Resection

Excision







Case 2:
Supporting
NPWT on a
high BMI
Abdomen







Case 3:
Abdominal
Incision







Case 4:

Protecting
Newly-Healed
Wounds From
External Forces





