Reduce Pressure Injuries in Your OR

Mölnlycke®

Reducing Peri-Operative Pressure Injuries in Thoracic, Cardiovascular, and Spinal Surgery Patients: Achieving an Incidence Rate of ZERO is Possible!

The University Health System's Peri-Operative team (Charlottesville, Virginia, USA) undertook a quality-improvement project with the goal of decreasing or eliminating HAPU in thoracic, cardiac, and spinal injury patients. The results are conclusive:

Castellino et al[1]

THE RESULT:

First Study - In 71 Thoracic and cardiac surgical patients positioned supine in OR there were **ZERO** pressure injuries observed in the Sacrococcygeal area as compared to 16.7% in historical controls. Two patients in this group experienced mild contact dermatitis from the dressing / device.

Second study – In 104 patients positioned prone for complex spinal fusion procedures on the Jackson Table there were **ZERO** pressure injuries observed on the skin overlying the chest and iliac crests as compared to 12 injuries in control group of 114 patients without dressing, a rate of 10.5% incidence. Three of 104 patients (2.9%) suffered minor injuries in areas adjacent to dressing, none resulted in Stage 3 or greater pressure injuries. The findings were statistically tested and found to be significant **(p =0.0319)**.

More evidence

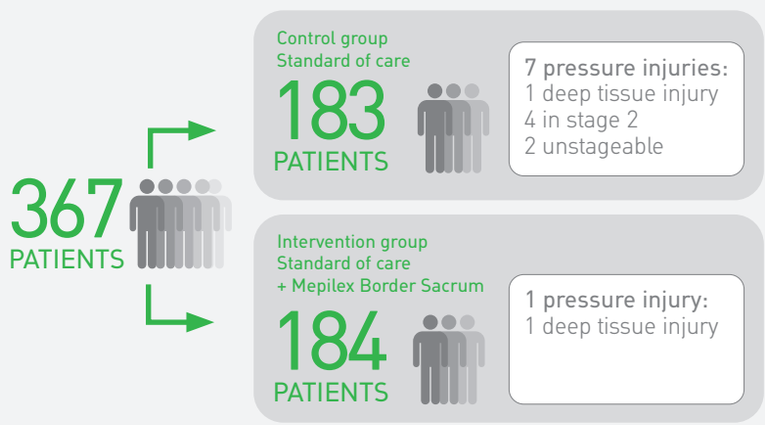
Cherry et al[2]
Cardiovascular OR & ICU

Included Mepilex® Border Sacrum in a care bundle used collaboratively by Cardiac OR and CICU to reduce incidence of post-op PU, especially DTI.

THE RESULT:

The implementation of a collaborative pressure injury prevention bundle reduced the incidence of HAPUs and DTIs from 12.4% to ranging between 0% and 1.5%.

"Use of a soft silicone, self-adherent, bordered foam dressing to reduce pressure injury formation in high-risk patients"
A randomized clinical trial (RCT) by Kalowes et al[7]



Statistically significant results:

p=.001

The use of the Mepilex Border Sacrum was found to be effective with **statistical significance p=.001**

Adoption of this wound dressing **will** improve outcomes in high-risk patients

Pressure injury formation related to positioning while in the OR increases the length of hospital stay and hospital costs[3]

Patients undergoing surgical procedures are at high-risk of pressure injury development. When a surgical patient develops a pressure injury within 72 hours after his or her procedure, it most likely indicates that the injury occurred during surgery.[4] The rate of intraoperatively acquired pressure injuries ranges from 12% to 66% in surgical patients; these pressure injuries are caused by intense or prolonged pressure that is unrelieved for a long period of time, resulting in damage to the skin and underlying tissue.[5,6]

So, what more can you do?

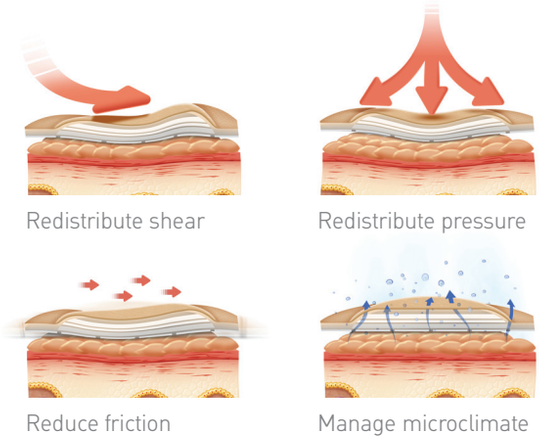
Global evidence-based practice recommendations for the use of wound dressings to augment pressure injury prevention protocols (August 2013) recommend[8]

"Consider the use of a multi layer silicone foam dressing to enhance, but not replace, pressure injury prevention strategies for the sacrum, buttocks and heel. (SOE* = A)"

* SOE - Strength of Evidence

The Power of Four

Adding a multi-layer silicone foam protective dressing, such as Mepilex® Border, to your prevention program is a clinically proven strategy.



Redistribute shear

Redistribute pressure

Reduce friction

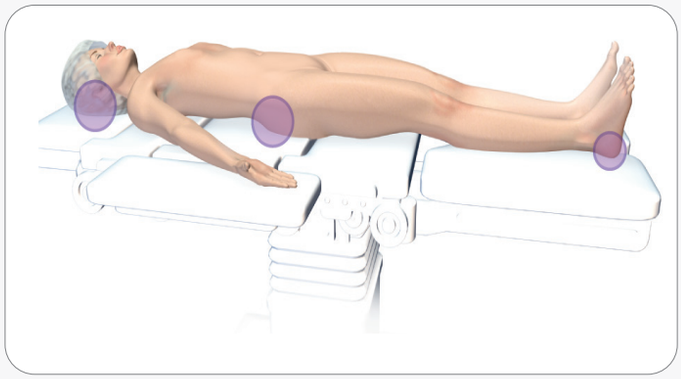
Manage microclimate

1. Assess skin and pressure injury risk
2. Reduce pressure
3. Avoid friction and shearing
4. Manage moisture early, and provide rapid treatment for breaks in skin integrity

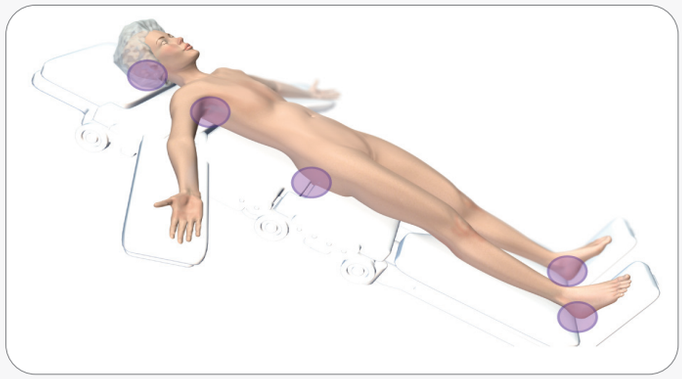
OR PRESSURE INJURY **PREVENTION***DRESSING POSITIONING GUIDE

Protect from: SHEAR PRESSURE MICRO-CLIMATE FRICTION

Supine/Reverse

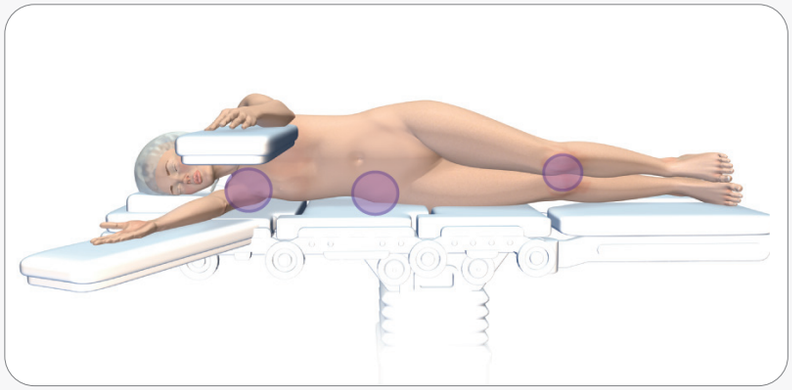


Occiput
Arms/Elbows
Sacrum/Coccyx



Scapula
Spine
Heels

Lateral/Side Lying



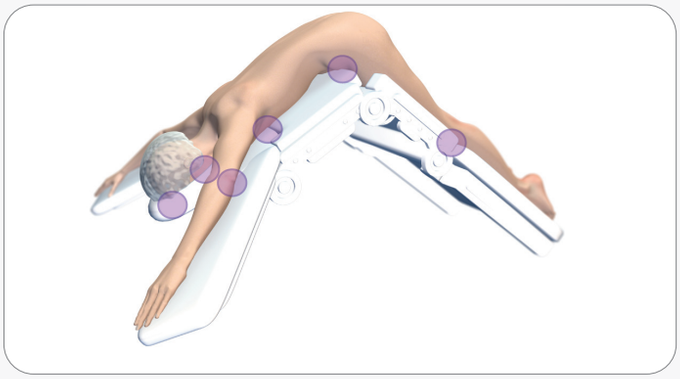
Shoulder
Axilla
Hip
Knee
Ankle
Feet
Side of Face/Ear
Dependent areas
(skin on skin)

Tips and tricks for prevention in the OR:

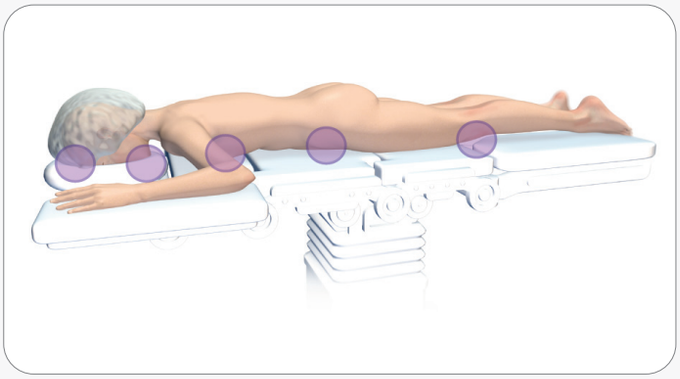
- Use low-friction slide sheets for lateral transfers
- Avoid allowing prep solutions to pool under patients, elevate heels
- Inspect OR and ICU mattresses monthly, replace when worn or damaged

= Areas at risk[1]

Kraske/Jackknife/Prone

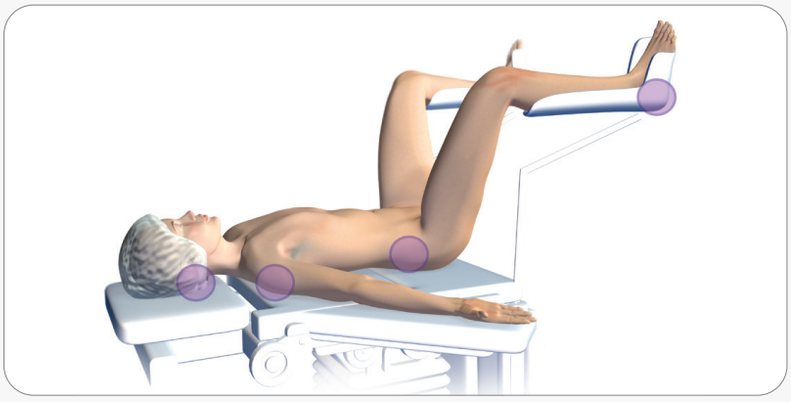


Forehead/Eyes/Ears
Anterior Shoulders
Iliac Crests
Knees/Shins
Toes



Chin
Breasts
Genitalia (men)
Dorsum of feet

Lithotomy



Occiput
Shoulders
Scapula
Hips
Heels
Sacrum/Coccyx
Lateral aspect of the legs

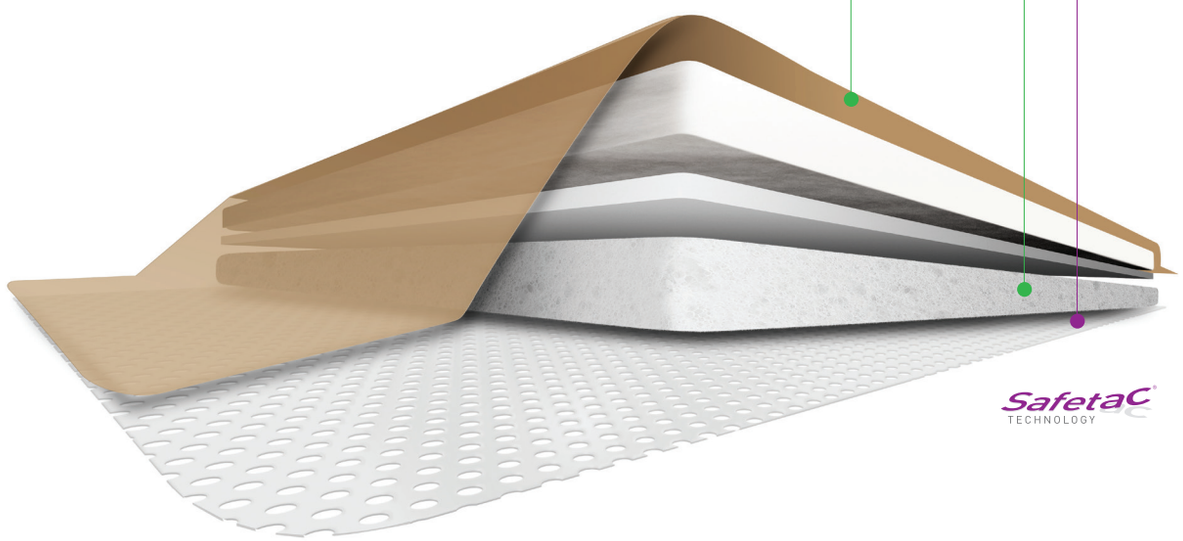
Notations

- Skin needs to be clean and dry before applying dressings with **Safetac®** technology
- Dressings with **Safetac®** technology **DO NOT** require use of skin barrier products

Use Mepilex® Border - A clinically proven dressing for the prevention of pressure injuries

The Global evidence-based practice recommendations for the use of wound dressings to augment pressure injury prevention protocols (August 2013)[8] recommend using: "A multi layer silicone foam dressing with the ability to redistribute pressure, redistribute and absorb shear, and effectively manage micro climate."

1. Skin contact layer: adhesive elastic/flexible soft silicone or silicone-like adhesive in total contact with the skin under the entire dressing that allows reapplication of the dressing for skin inspection
2. Moisture absorption characteristics: spread, lock, evaporate
3. Thickness: allows redistribution of pressure
4. Several sliding layers: ability to move independently of each other dissipates shear
5. Outer breathable layer: minimizes friction between the dressing and the bed linen: (lower coefficient of friction)



Prevention costs less than treatment

Hospital-acquired pressure injuries have been estimated to cost **$44,000** for a category II PU to **$90,000** for a category IV PU.[9] Do you know how much it costs in your department? Are you aware of how much you can save by adding Mepilex Border Sacrum to your prevention protocol? **Contact your local representative to find out more.**

Global evidence-based practice recommendations for the use of wound dressings to augment pressure injury prevention protocols (August 2013)[8]

"Before selecting a dressing consider the current status of the skin and the ease of dressing removal in order to prevent mechanical stripping. (SOE*= B)"

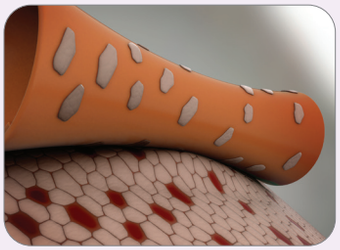
* SOE - Strength of Evidence

Dressings with Safetac technology are ideal for use in prevention.

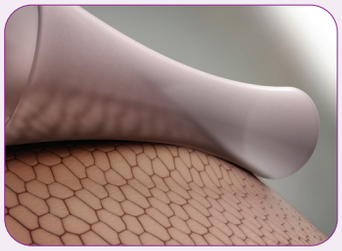
They adhere gently to the skin, can be lifted for inspection of skin, and do **not cause trauma on removal. They will re-adhere to the skin after inspection.**

Why use products with Safetac® technology for pressure injury prevention?

Safetac is a unique patented adhesive technology that minimizes pain to the patient and trauma to skin and tissue.[10]



DRESSINGS WITH TRADITIONAL ADHESIVES CAUSE PAINFUL SKIN STRIPPING



DRESSINGS WITH SAFETAC WILL NOT STRIP SKIN CELLS OR CAUSE PAIN ON REMOVAL

Safetac technology hurts less because:

1) Safetac will not strip skin cells or cause pain on removal and it will re-adhere.[11]
2) Safetac absorbs shear energy reducing the shearing effects on the skin.[12]
3) Safetac reduces skin distortion and therefore increases skin cell viability.[13]

Safetac® TECHNOLOGY

Select appropriate product based on area to protect:

Sacrum Prevention

SOLUTIONS:

Mepilex® Border Sacrum

Heel Prevention

SOLUTIONS:

Mepilex® Border Heel

Prevention in the OR

SOLUTIONS:

Mepilex® Border Flex

Mepilex® Border Flex Oval

References

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