



Study about the qualities of a soft, bi-elastic silicone adhesive bandage as a wound dressing

A retrospective study (Published: Nursing 2011)

Introduction

Many dressings are available on the market. Often they claim to reduce the healing time. A limited study about wound healing has been organised among residents of different nursing homes and day care centres to evaluate the use of a soft, bi-elastic silicone adhesive bandage with a lycra top layer (hereinafter referred to as Reskin®) as a wound dressing. The first preliminary results of the study suggest that Reskin® is a bandage with a lot of potential.

Wound dressings exist in all kinds of colors, sizes, types and shapes. Many characteristics and features are required from wound dressings. Dressings have to create an optimal moist environment, allow an exchange of gasses, offer thermal isolation, avoid additional injury, be impenetrable for microorganisms, be safe to use, be wound-edge-friendly, absorb well or regulate moisture, have constant properties, be comfortable, be available, remain in place for extended periods, offer mechanical protection, allow for wound inspection, be user-friendly and last but not least, be cost-efficient. Obviously, the ideal bandage is hard to find. Nevertheless, this list is a valuable means for testing the properties of a bandage in theory. Finally, it is the bandage's properties on which the nurses or doctors base themselves when choosing a bandage for each specific application.

Reskin® dressings meet the essential requirements. The bandage is breathable, offers protection against lesions due to additional friction, is safe to use, is wound-edge-friendly thanks to its silicone skin contact layer, allows moisture to vaporise, has constant properties over time, is comfortable and available, stays in place for longer periods of time, offers mechanical protection, is user-friendly and quite cost-efficient.

Methodology



In a period of 3 months 11 residents (10 women and 1 man) with superficial and relatively small wounds, 1.5 to 16 cm², were selected. The ages varied between 78 and 96 years. The age of one resident was not registered.

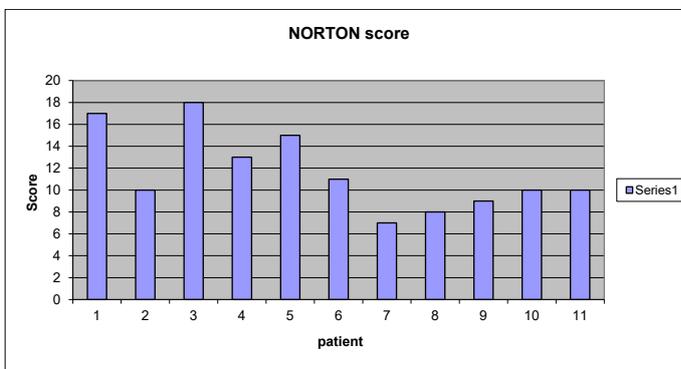
The sex, the number of bandage changes until healing was registered for each resident, the NORTON score, the number of days to full healing or until the treatment was stopped due to problems, the co-morbidity and the experiences of the nurses.



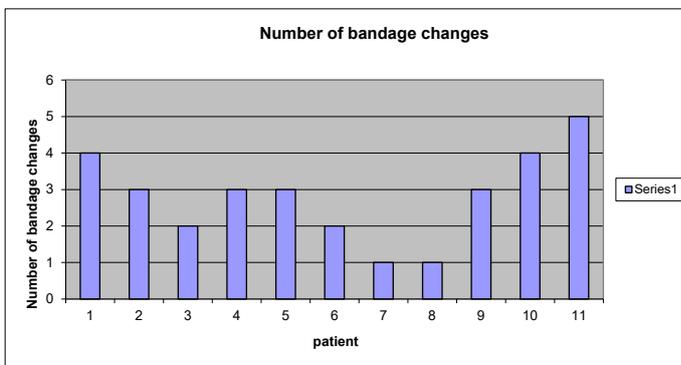
Results

Out of the 11 residents, 4 had skin tears, class IIa to class III, 1 resident suffered from a category 2 pressure sore, 1 resident had several small scratch lesions, 1 resident had friction lesions (slight abrasion) and 3 residents had grazes.

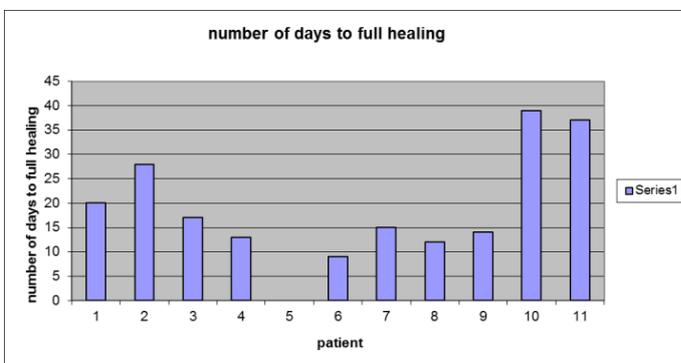
The residents had different underlying pathologies, including dementia, cardiovascular disorders, recovered from a fracture or were paralysed on one side.



The NORTON scores were between 7 and 18, the average was 11.63. Seven residents had a score of 11 or less. The NORTON score, in other words the care need, did not affect wound healing.



For one resident (patient 5 in the graph) the use of the bandage was stopped after 3 bandage changes because the wound edges were macerated and infection occurred (skin tear patient class 2a). For the other 10 residents the number of bandage changes varied between 1 and 5 to full wound healing.



The number of days to full healing was between nine and thirty-nine days. For one patient the wounds did not heal. The average healing time was 20.4 days for the other residents.



Valuation by nurses

Nurses found the bandage easy to use. The packaging was easy to open and the bandage was easy to apply and to remove. One nurse had nevertheless some difficulties applying the bandage. Some nurses made some remarks concerning the repositioning of the bandage. For one resident the bandage is further used preventively to avoid the appearance of new skin tears. The nurses found the bandage skin-friendly; in their opinion the bandage protected the thinning skin of older residents well.

Conclusion

The study shows that Reskin[®], used as a wound dressing, can be a very valuable bandage for the care of superficial wounds. The wound heals fairly quickly and relatively few bandage changes are required (1-5). The bandage lives up to the properties it claims to have: Reskin[®] is breathable, offers protection against lesions due to additional friction, is safe to use thanks to its silicone skin contact layer and wound-edge-friendliness. The bandage allows the wound moisture to vaporise. The bandage stays in place for longer periods of time, offers protection to the skin and is quite user-friendly. Due to the few bandage changes required, it is also cost-efficient.