FREUDENBERG HEALTHCARE VALUE STORIES

SILICONE DRESSINGS: CLINICAL PERSPECTIVE

BY KEITH CUTTING

Wound dressings and the materials used in their construction have advanced considerably from the days of providing mere protection from the external environment.[1] The provision of; a moist environment, ease of application, intimate contact with the wound bed along with atraumatic application and removal are regarded clinically as principal dressing requirements.[2 3]

Polyurethane foam dressings are renowned for being; absorbent, conformable, soft to the touch and have a well-established position within wound care.

Typically, silicone foam dressings are used on shallow, light to moderately exuding wounds. They help to maintain a moist environment, provide thermal insulation and a degree of protection of the skin when placed over bony prominences.[3]

Principal contouring advantages

Intimate contouring of the wound bed by the dressing is often associated with Hydrofiber's gelling fibre technology and its capability to obliterate dead space.[4]

‚Dead space' is a void that may be found in soft tissue lying between the wound bed and the dressing.[5] It may also apply to a void found after soft tissue or bone resection.[6] Exudate that may pool in this void is linked to potential infection/biofilm formation.[7] Intimate contact of the wound dressing with the wound bed has the capacity to obliterate dead space. The obliteration of dead space is not usually associated with the application of a foam dressing. Freudenberg's technology delivers functionality that aspires to gelling fibre dressing performance. Perfection in wound bed contouring is a result of Freudenberg's patented technology used in the non-laminar application of silicone to the dressing, as the silicone is uniquely coated in the form of a pattern. The conventional laminar approach often found in market-leading products will militate against intimate contouring of the dressing with the wound bed.

Principal anti-adherence advantages

Silicone adhesives are popular because they are gentle and easy to remove from the surrounding skin and do not generate a new trauma to the wound on removal. However, in recent years there is a trend to use rather strong silicone formulations to ensure longer wear times.

Skin stripping or new tissue trauma can be a consequence of using high adherence adhesives.[8 9] Freudenberg's two-type silicone technology allows for different silicone forms in one dressing with varying characteristics to be utilised in the appropriate circumstances using dressing variants, thus providing authentic atraumatic dressing removal. Whilst there is a higher adherence silicone coat on the bordered surface in contact with the surrounding skin, low adherence silicone is coated on the dressing which has direct wound tissue contact.

In summary:

Freudenberg has successfully generated a versatile, next-generation foam dressing that sets it apart from competitor products. The exceptional combination of exquisite dressing contouring including gelling fibre like properties and the two-type silicone adhesive technology makes this inimitable product stand in a class of its own. Thus, delivering clinically relevant added values when compared to other widely available products. The inclusion of an optional anti-microbial variant in the dressing portfolio further widens the range of clinical indications.

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