Moist Wound Healing

Active dressings, what are they and why do we use them?

ALGINATES ANTIMICROBIALS FILMS FOAMS HYDROCOLLOIDS HYDROGELS are the names of dressing products that can be described as “active” dressings because they interact with the wound bed in providing a “moist” environment, conducive to optimum healing. This article will provide a brief overview of these active dressings and why moist wound healing has become a preferred approach when managing most chronic wounds rather than encouraging the wound to dry out and form a scab.

Moist wound healing is not recommended when there is dry dead tissue with insufficient blood flow to the affected body part to support inflammation and wound healing; and in palliative care where healing is not a realistic goal and necrotic tissue provides protection of deeper vascular structures.

The principles of moist wound healing came about from research conducted in the’ 40s where it was found that wounds actually closed faster by covering the wound and keeping the area moist. The moist environment stimulated activity in the wound bed allowing cells to repair the injured tissue and remove wound debris. Growth of new skin was found to be faster and more efficient in a moist environment when compared to leaving a scab to dry out. It is more difficult and a slower process for cells to repair skin under a dry hard scab. This is only until the outer skin layers eventually shed.

The scab itself can become a problem if left open. It can be knocked, traumatised and at times serve as a focus for bacteria (bacteria may have been multiplying under the scab & the inflammatory process can start over). Dressings can be used to prevent dehydration of the wound surface and gently absorb fluid or offer protection for fragile new skin until it regains strength. Dressings are selected on the basis of their action to match the goal of care. These dressings have been described as “intelligent” implying that little thought is needed when applying it onto a wound. This assumption could not be further from the truth. Wound healing is a complex process and the wound is only the end result or a symptom of deeper problems that have caused the development of a wound in the first instance.

ALGINATES are highly absorbing biodegradable fibrous material derived from brown seaweed that interacts with wound surface to produce a gel-like substance to aid gentle removal when saturated. Alginates have been used in the food industry for many years and are available in flat sheets to lie over the wound bed or in a “rope” to pack into a wound cavity. Alginates have been added to other types of dressings like gels and hydrocolloids to aid extra absorbency within the dressings. The main function of the alginate is to absorb exudates, gently fill a cavity while healing and can stop bleeding once applied.

Some of the names of alginates are: kaltostat, sorbsan, algoderm, algisite m, tegaderm alginate, sorbalgon, melgisorb, curasorb, seasorb, calcicare.

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