

Saljet® Offers Ideal Method of Irrigation and Cleansing of Open Wounds



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All wounds should be irrigated/cleansed: initially and with each dressing change. With goals of removing debris, necrotic tissue, and purulent exudate, an important addition is removing biofilm, which delays proper healing. Normal saline (NS), 0.9%, is the optimal solution. It should be delivered at least at 8 psi to be efficacious, and no more than 15 psi to be safe. The NS should be sterile and warm, the delivery method easy to use, and also cost effective.

Many skin cleansers are cytotoxic, with the dilution that is required to be non-cytotoxic rendering their efficacy essentially nil. If used in the Emergency Department and/or at the initial visit to aid in removing debris from a traumatic wound, the wound immediately should be flushed with NS following the cleanser if it contains surfactants and/or is cytotoxic. The same is true with antiseptic agents that are toxic to human fibroblasts, among them Betadine® (povidone iodine), Hibiclens®, and pHisoHex®. Actually, Betadine never should be used on an open wound. If iodine is needed, a cadexomer iodine that is not cytotoxic is available.

Whirlpools are no longer appropriate for wound management and have not been for many years, for many reasons (out of the scope of this article). For complex wounds requiring debridement and those with deep tracts and tunnels, pulsed lavage is the intervention of choice. For all other wounds, NS can be delivered by several methods.

Pouring NS from a bottle does not provide the adequate psi. Bottles opened in a patient's room must remain in the room and be discarded after a prescribed number of hours, usually 24, resulting in waste. Once the bottle has been opened, it no longer is sterile. Often several opened bottles can be found in each room – more costly waste. Using a bulb syringe with impact pressure of 2 psi, the required psi is not delivered. A syringe with a 19 gauge needle delivers 8 psi, but has safety concerns to both patient and clinician and requires a sterile basin. Spray cans have different psis, and should be used for single patients only. They have aerosolization spray concerns, in addition to being cold and the likelihood of pressure decreasing as the can is used. Of course, it is well known that the Water Pik®, besides the inability to disinfect it, delivers 42 psi at the middle setting and greater than 50 psi at the highest setting, which can cause trauma and drive bacteria into the wound.



An ideal method of irrigating and cleansing open wounds is by using Saljet®. This unit dose of NS is safe, easy to use, and cost-effective. With no preservatives, surfactants, or buffering, 30ml of sterile NS is contained in a polymer vial that can be recycled, or can be discarded in regular trash. The single-use vial has a twist off top (also recyclable) and a design that delivers 4 - 8 psi of NS to the wound with a firm squeeze of the vial. The maximum is 10 psi, no matter how hard the vial is squeezed. Saljet aids in the reduction of biofilm and can be used to irrigate and cleanse undermining, tracts, and short tunnels by inserting the pointed tip into the area. There is no concern for contamination of opened bottles being reused, or the danger and cost of syringes, needles, and basins. Because it is single use and cannot be recapped, patient safety is assured, as there is no danger of cross contamination.



The importance of warming fluid used to irrigate wounds is easily addressed by putting the vials in the clinician's lab coat/scrub pocket to be warmed by body heat. They also can be placed in a container of warm water or even given to the gloved patient to hold while dressing change preparations are being prepared. Thermocline – the principal that the wound must remain at least at body temperature for optimal healing -often is overlooked by wound management clinicians. It is another reason that the less often a dressing has to be changed, the more rapidly the wound will heal. It takes approximately four hours for a wound exposed to air, and more exposed to cold, to begin the healing process again.

An additional use of Saljet is to moisten dried dressings for removal in order to avoid damage to viable granulation tissue. It also is helpful in soaking NPWT (negative pressure wound therapy) dressings that have adhered to granulation tissue. Several NPWT pre-packed kits already contain the product.

Saljet is appropriate for use in the hospital, home health, long term care, nursing home, urgent care center, emergency room and emergency services, workplace employee health departments, the military, and even veterinarian offices. It is small and lightweight – only an ounce per vial – and easily fits in a pocket, backpack, or medical case.



The product is FDA approved and licensed since 1999 for use in dressing changes, which the often used small respiratory vials of NS are not. Because it is not considered a pharmaceutical, it does not have to be kept under lock and key. It does not have to be dated or timed during a procedure. Licensed as a device, it can be used whenever a physician has ordered saline for a dressing change. The NDC number is 64938-009-01. The SDS (Safety Data Sheet) (formerly MSDS) indicates no hazard, no cytotoxicity, no carcinogenicity.

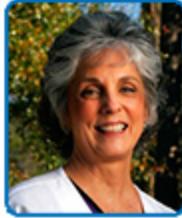
In its most recent upgrade, it has a 36 month shelf life. The vials are packed four to a strip, and each box contains ten strips. There are six boxes in a shipping case. The HCPCS code is A4214. It is distributed in the U.S., Canada, and Bermuda. Purchasing Departments can contact distributors.

Saljet is safe and effective and saves time, waste, and money. No needles or syringes necessary, no sterile basins. Easy and quick to use, staff time is saved. Single use 30ml vials save on waste from opened unused liter bottles. Patient safety improved with no cross contamination. Easy to warm to prevent delay in healing. Four-eight psi debrides biofilm. And it has even appeared on TV in an episode of Grey's Anatomy, used by "Dr. Mark Sloan"!



Featured Lecture

Update on Wound Cleansing



Harriett B. Loehne, PT, DPT, CWS,
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Harriett B. Loehne & Associates
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Harriett Loehne, CWS, DPT, FCCWS, PT, provides an overview of the goals and importance of wound cleansing and irrigation. Methods to treat both non-complex and complex wounds are discussed, as well as the interventions that are neither safe nor efficacious.

Available Credits: CEU 0.50

This presentation was
made possible by
an educational
grant from:



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This ezine was supported by an educational Grant from:



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