Long-Term Care Survey Alert

WOUND CARE: Boost Positive Outcomes For Negative Pressure Wound Therapy

Outline and follow the do's and don'ts for this expensive therapy.

If your facility uses negative pressure wound therapy, you need a protocol that spells out how to provide this modality safely and effectively. That way, you'll get the biggest clinical bang for the sizeable number of bucks and avoid negative outcomes.

The cost of wound vacs is very high, but using them can hasten wound healing, says Maureen Wern, CEO of Wern & Associates in Warren, OH.

Negative pressure wound therapy provides subatmospheric pressure to the wound bed, which accomplishes several things, says Penny Campbell, PT, CWS, FCCWS, clinical consultant for BlueSky Medical Group which makes one of the available negative pressure wound therapy products. The benefits include:

• Bringing blood flow to the area and stimulating granulation tissue;
• Decreasing the excess fluid or edema in the wound bed that prevents the wound from healing;
• Promoting wound contraction by bringing in the base and the sides of the wound;
• Protecting the wound from outside contaminants;
• Decreasing the wound bioburdens by removing contaminants and excess exudate;
• Maintaining a moist wound healing environment. "Negative pressure wound therapy helps the wound stay moist because you're providing an occlusive outer dressing that keeps the cells from drying out," says Peggy Dotson, RN, a wound care specialist and principal of Dotson Consulting in Yardley, PA. The negative pressure suction removes the excess moisture that delays healing, she adds. "And it reduces the 'bacteria friendly' environment created by dead tissue and excess fluid."

The negative pressure wound treatment works on partial and full thickness pressure ulcers, as well as dehisced surgical wounds, diabetic neuropathic wounds and venous insufficiency ulcers, among others, says Campbell. It "works well for arterial ulcers as long as the artery isn't completely occluded."

The therapy also helps infected wounds, adds Campbell. Infected wounds usually have more exudate so you would likely change the dressing more often, she adds. "As the infection decreases, so will the exudate and ultimately" how
frequently you need to change the dressings.

**Nail Down the Contraindications**

Don't use negative pressure therapy on a wound that has a malignancy or on untreated osteomyelitis or over exposed blood vessels, says **Michael Miller, DO**, a wound care expert in Linton, IN.

**Do this:** Biopsy suspicious wounds before applying negative pressure wound therapy, advises Campbell. Wound biopsies are important to do because the therapy “will stimulate cell growth.” Also on the “do not use list”: an unexplored fistula, adds Campbell. Exposed organs or structures are also a contraindication for using the therapy.

**Watch out for bleeding after debridement:** “If the clinician debrides a wound at the bedside in the nursing home—and bleeding occurs—wait 24 to 48 hours for the wound to stabilize before applying negative pressure wound therapy,” advises Campbell. Otherwise, if the debridement procedure damaged a blood vessel and you apply suction to the wound, “a bleed out could occur.”

Campbell advises facilities to develop guidelines or protocols that identify not only the types of wounds the therapy can be used to treat—and the contraindications—but also how to do the following tasks:

- Apply and remove the dressing;
- Set the pressure;
- Monitor the wound for signs of improvement/decline;
- Troubleshoot the system;
- Monitor drainage type/amount.

“Staff should check at designated intervals to insure that the pressure is set to the prescribed amount,” adds Campbell. They should also “check the dressing for integrity” and make sure a leak is not present. “Observe the periwound skin for any irritation, redness or maceration.”

**Meet Survey Requirements**

The F-Tag 314 “states that if you don't see the wound progress within two to four weeks re-evaluate the treatment approach and make appropriate changes,” Dotson points out.

Make sure the physicians and nurses receive training on how to use the negative pressure wound therapy. Facilities can get cited for deficiencies based on “improper use” of the treatment due to lack of proper training, cautions **Joseph Bianculli**, an attorney in Arlington, VA.