Economical negative pressure wound therapy

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CORRESPONDENCE TO

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BACKGROUND

Commercial negative pressure wound systems are expensive (>£1,000 per month per patient).¹ This technique highlights that negative pressure wound therapy can be created inexpensively from parts commonly available in operating theatres (Fig 1).

Figure 1 Components of the negative pressure wound dressing. From left to right are the Redovac® (B Braun, Melsungen, Germany) drain, trocar, adhesive drape, foam sponge and stapler.

Figure 2 In situ negative pressure wound dressing prior to application of negative pressure

TECHNIQUE

The wound is debrided prior to negative pressure dressing application. The foam sponge is placed onto the wound to create an imprint of the wound's shape. The foam is then tailored to match the wound imprint and in deep wounds the foam can be piled in layers. The drain is passed longitudinally through the body of the foam or placed between two layers of foam before exiting. The exit site of the drain is away from the wound. The foam is secured with staples to the adjacent skin. The surrounding skin is dried and the adhesive drape placed over the entire wound and surrounding skin (Fig 2). A vacuum drain is attached and, once opened, induces the characteristic foam sponge collapse, indicating that no leak is present (Fig 3).

Figure 3 Characteristic foam sponge collapse after application of vacuum

DISCUSSION

According to the 2011 NHS Supply Chain catalogue, the overall cost required to assemble this negative pressure dressing is less than £30.¹ At a time of limited healthcare funding, practising proficient wound care means finding solutions that will not compromise the quality of care while achieving financially viable, positive options.^{2,3} Based on the author's experiences, this technique has been successfully used for management of a wide variety of open wounds and provides results similar to expensive commercial negative pressure wound systems.

References

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