

## LETTERS

## Glove Vacuum-Assisted Wound Closure for the Scrotum

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Modified vacuum-assisted wound closure with a surgical glove has been proven effective [1]. Fournier's gangrene is a condition that has the possibility of sepsis and delayed healing. Vacuum-assisted wound closure has been done with V.A.C Vacuum-assisted closure (KCI,



**Fig. 1.** Debrided Fournier's Gangrene with both testes exposed.

San Antonio, TX, USA) for scrotal wounds [2-4]. We would like to suggest the use of a vacuum with a surgical glove for healing a scrotal wound following Fournier's gangrene. We have found that this method promotes faster healing in a low-cost setting.

A 46-year-old type-2 diabetes mellitus patient presented with Fournier's gangrene and sepsis syndrome. Following debridement (Fig. 1), modified vacuum dressing was performed with a sterile size 7½ surgical glove. The glove was cut as shown in Fig. 2 and stapled circumferentially at the base beyond the edges of the wound with the other end cut open below the fingers. The interior of the glove was packed with sterile foam or gauze with a suction catheter or Ryle's tubing (Fig. 3). The free end of the glove was plicated and sealed with opsite or with the latex ring of the glove, and a vacuum was created using a suction machine (Fig. 4). An intermittent suction of 125 mm



**Fig. 2.** Cut end of surgical glove stapled to remnant skin.



**Fig. 3.** Packing with autoclaved gauze or foam and tubing.



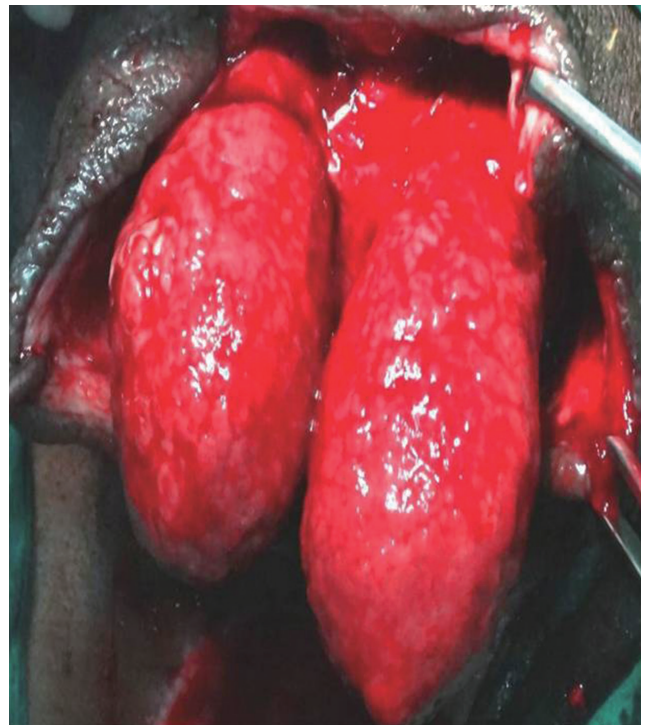
**Fig. 4.** Application of the vacuum with a surgical glove.

of Hg for 20 min/hr was applied. The tubing and foam was changed every day after a thorough wash by exteriorising the interior of the glove without removing the staples. This method is very similar to the use of a Bogota bag [5]. Consequently, the edema was reduced drastically, and the slough was entirely cleared out of the wound on day 11 following debridement. The wound contracted well, and the patient opted for primary closure on day 16 (Fig. 5). The wound closure was done by raising the scrotal flaps. The postoperative period was uneventful, and the wound healed well.

We suggest that whenever possible for scrotal wounds with a rim of scrotum remaining, modified vacuum dressing can be attempted with a surgical glove, as done in this case. A surgical glove fits snugly to the irregularity of the contour and can be used to apply a vacuum and promote faster healing. It is a sterile, cheap, and effective method. The change of dressing is relatively easy, and the vacuum-assisted closure reduces systemic inflammatory response syndrome, and the duration of hospital stay.

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**Fig. 5.** Wound healing on day 16 after debridement.

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## Facial Cushioning during Prolonged Surgery in the Upper Torso

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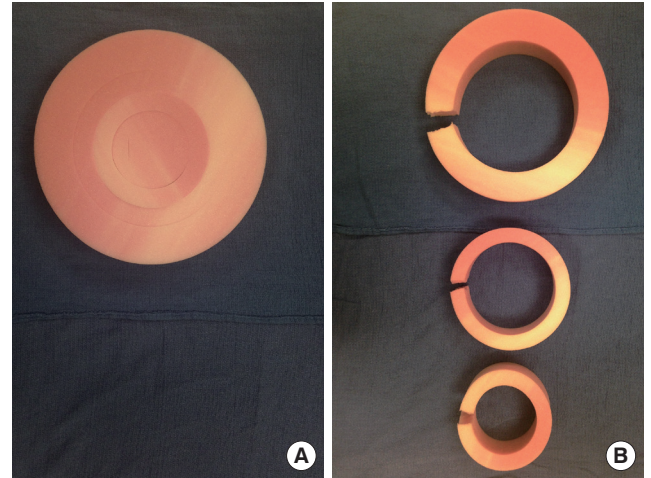
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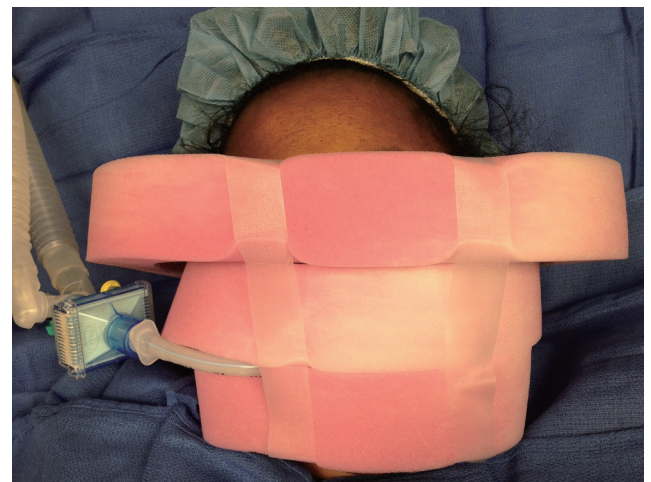
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Safe patient positioning is a basic tenet of surgical preparation. Numerous publications describe the principles of protecting areas of the body that may be prone to injury from pressure or stretch [1-4]. Undoubtedly, many surgeons and anesthesiologists have developed their own modifications to accommodate for their particular needs and comfort, while maintaining the fundamental elements necessary to provide for a safe surgical environment.

We herein describe a simple method to guard the face from direct pressure during surgery of the upper torso. The need arose performing autologous breast reconstruction that required prolonged operating in the upper chest. This incurs the risk of the operating surgeon and assistant to inadvertently rest their elbows on the patient face,



**Fig. 1.** The Devon Whole-in-One (Kendall) headrest (A) and (B) the headrest disassembled into its components as described in the text.



**Fig. 2.** The headrest components separated and placed on the patient's face during surgery.

risking displacement of the endotracheal tube and potentially injuring the eyes, nose, and mouth.

The Devon Whole-in-One (Kendall) headrest is typically used to cushion the patient's head in the supine position. It is made of non-toxic, latex-free foam, and can be adjusted to fit by removing portion of the foam as needed. We use the foam to pad the patient's face during surgery in the technique described below. Other headrests and foam (such as "egg crates") tend to be bulky and may impede surgical access by partially obstructing the surgical field.

The headrest is comprised of four circular components of varying thicknesses. The inner core is discarded. The outer ring is torn in half and used to cover the eyes like sunglasses. The second layer is cut and placed over the nose, with a slit made to accommodate for the endotracheal tube. The third layer is split and placed over the chin (Figs. 1, 2).