DISCUSSION

The distance between two openings in the muscular fascia reduces the risk of trocar-site hernias because of the angled path through the abdominal wall. We also use this technique in patients who have undergone surgery previously (a shielded trocar should be used in such cases). This technique is advised for positioning of trocars in pararectal regions and the lateral abdominal wall. A sufficient muscular plane dividing anterior and posterior sheaths is needed.

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A method for rapid laparoscopic irrigation

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BACKGROUND

One of the disadvantages of high-volume peritoneal toilet, if undertaken via a laparoscopic approach, is that the irrigation-and-suction device is a combined instrument that limits the ability to achieve high-volume washout in a timely manner.

Figure 1 The suction tubing is connected to the insufflation inflow of the laparoscopic port and is controlled by the valve mechanism. If the port tip is kept beneath the waterline, then rapid, high-volume irrigation can be carried out with simultaneous suction.

TECHNIQUE AND DISCUSSION

A laparoscopic port is used as a separate suction channel by connecting the suction tubing to the insufflation valve (Fig 1). This strategy allows simultaneous high-volume irrigation with continuous suction if the port tip is kept below the 'waterline', thereby providing more thorough and rapid washout.

Combination of a drainage tube and fenestrated topical negative-pressure device for the management of Morel–Lavallée lesions

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BACKGROUND

Morel–Lavallée lesions (MLLs) are post-traumatic, closed degloving injuries that occur as a result of the separation of subcutaneous tissue from the underlying fascia.¹ Management of MLLs is complex.² We report a technique that combines drainage tubes and topical negative pressure (TNP) therapy for early management of MLLs.

TECHNIQUE

After undertaking seroma evacuation and debridement, TNP foam is prepared along with drainage tubes and trocars (Fig 1).

TNP foam is fenestrated into a finger-like shape but with preservation of a broad base that connects the multiple limbs (Fig 2). Trocars connected to a drainage tube are inserted along the length of each limb from the tip towards the base (Fig 3). The free end of the drainage tube is left ≈15cm out of the foam. The other end of the

Figure 1 Instruments required for configuration of a topical negative pressure (TNP) device. Pictured on the right are the TNP foam, tube and adhesive drape (VAC® Therapy System; KCI USA, San Antonio, TX, USA). Pictured on the left are drainage tubes and trocars (Van Straten Medinorm, Spiesen, Germany).

Figure 2 Cutting of the TNP foam. The size of the TNP foam and number of drains/limbs should be consistent with the size of the Morel–Lavallée lesion (MLL) cavity. Care must be taken not to reduce the diameter of the area where the limbs are connected to avoid the risk of breakage from the base. A minimum width of 25mm is recommended and, if a tapered configuration is considered, the narrower area should be at the tip (and not at the junction) of the limb.

Figure 3 Insertion of trocars and drains into the TNP foam should be from the tip of the limb towards the base of the limb.

drainage tube is cut flush and pulled within the foam so that the drainage tube is buried (Fig 4).

The foam limbs are inserted inside the MLL cavity with the free end of the drainage tube placed at the furthest margins of the MLL cavity (Fig 5). The base of the TNP foam is allowed to protrude through the wound and dressed in the usual fashion with TNP drapes and pad connected to a pump.

Figure 4 Cutting and burying drainage tubes in the TNP foam. If the tip of the tube is not covered by the TNP foam it will preclude suction at that tube once the adhesive drape is covering it.

Figure 5 Final view of the device once it is ready to be inserted into the MLL cavity.

DISCUSSION

The technique described here aims to facilitate contact between the inner walls of the MLL cavity with the fenestrations of the TNP foam while allowing continuous controlled suction of fluid. If consecutive debridement is needed, the size of the TNP foam should be reduced progressively to facilitate sealing of the MLL cavity.

Advantages of TNP-based therapy are control of oedema, increased perfusion, and reduction in bacterial counts.³ These features help to prevent the reported complications of MLLs (eg infection, extensive necrosis of skin).⁴

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