TECHNICAL SECTION:
Technical tutorials, notes and tips

Abdominal surgery

Positioning the patient for abdominoperineal excision of the rectum (APER)

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APER may be required to treat very low rectal and anal tumours and chronic inflammatory bowel disease. It is traditionally described as a combined synchronous procedure, with the patient in the Lloyd-Davies position.[1] This has two disadvantages. Since the pelvic dissection requires some upwards traction on the rectum, while the perineal dissection requires some downwards traction on the anus, it is advantageous to carry them out sequentially. Moreover, the Lloyd-Davies position is not optimal for perineal surgery. A more logical and effective method is described.

The anaesthetised patient is placed in lithotomy. Wedges or sandbags are not used. The patient's legs are suspended inside the padded lithotomy poles which are adjusted to a higher and more cephalad position, giving a high lithotomy position.[2] A long leg-end piece is attached to the table and the patient returned to the supine position, ensuring that the patient is not moved up or down the table. The lithotomy poles are left attached to the table but tilted horizontally towards the patient's feet.

The patient's abdomen is prepared and draped conventionally and the abdominal and pelvic parts of the operation proceed to completion of rectal mobilisation. The abdominal wound is covered with a drape, the drape covering the patient's legs is pulled up, and the lithotomy position restored. The perineal skin is prepared, and lithotomy drapes applied.

The perineal dissection is carried out, the specimen removed, and the perineal wound closed and dressed. The patient is returned to the supine position. A fresh drape is used to cover the patient's legs, and the abdominal operation is completed.

In this way, a vastly superior view of the perineal procedure is obtained, facilitating precise dissection and haemostasis. The overall duration of leg elevation is greatly reduced. We have seen no case of lower limb neuropraxia[3] or compartment syndrome.[4]

It is worth noting, of course, that when a low anterior resection might be accomplished, the conventional Lloyd-Davies position should be used from the outset.

References

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The open abdomen – a simple cost-effective technique for laparostomy management

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Background: Definitive closure of the abdominal wall may not be optimal management in certain conditions such as severe pancreatitis, where laparostomy could represent the best damage limitation surgery.[1] Many techniques of temporary laparostomy closure have been described.[2,3] A high complication rate is associated with all forms of closure, predominately herniae and enterocutaneous fistula (up to 75%).[4] We describe a simple technique that, in the authors' experience, has not resulted in any fistula formation and has not previously been reported in the literature.

Patients and Methods: When undertaking a laparostomy for temporary abdominal closure, we routinely apply an Op-Site (Smith and Newson, UK) dressing onto the visceral surface of non-absorbable mesh. The Op-Site sticks readily and, once it has been applied, the mesh can easily be cut to the required size and shape. It is sutured to the fascial defect with a running 1 polypropylene suture (Prolene, Ethicon, UK). Suturing the mesh to the fascial layer prevents lateralisation of the rectus muscle and subsequent motor impairment. This combination provides a non-porous temporary abdominal closure,

Repeat laparotomies are performed by incising the prosthesis, and closing with a running suture. This technique also allows for an easy stepwise trimming of the mesh to allow approximation of the fascial edges. The prosthesis can be removed when the underlying pathology is controlled and the threat of abdominal compartment syndrome is reduced, without the problems of visceral adhesion to the mesh.

Discussion: Several authors[5] have favoured the use of adhesive dressings (such as Op-Site) or non-adhesive sterile plastic foil (*e.g.* Bogota-bag) as a material for temporary

closure of the abdominal defect. However, the use of these materials alone is limited as it usually provides inadequate mechanical support. Using non-absorbable mesh alone results in adhesion between mesh and underlying viscera and subsequent fistulation. Combining Op-Site and non-absorbable mesh provides a simple elegant technique to prevent this.

This simple and cost-effective laparostomy prevents abdominal viscera from sticking to the mesh and subsequent fistula formation. Repeat operation and removal of the mesh are easily achieved. The senior author has been using this technique for temporary management of laparostomy wounds without fistula formation for over 5 years. As both materials are readily available in most hospitals, it negates the need for stocking more expensive ready-made prostheses.

References

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A cork in a bottle – a simple technique for removal of a rectal foreign body

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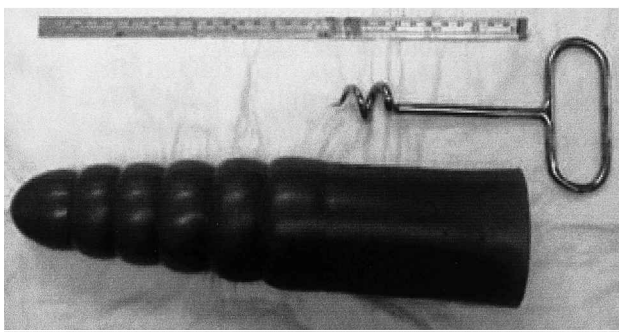

Figure 1 Dildo with myomectomy screw after removal.

We admitted a patient with a large dildo in his rectum. It was too slippery to grip manually and grasping forceps cut through it. Obstetric forceps (which add additional diameter, and fit around spherical, rather than cylindrical objects) and ventouse were not available. Myomectomy screws are used to manipulate fibroids, and consist of a metal helix with a handle. One of these was inserted, as a corkscrew into a cork, into the base of the dildo, taking care that the screw did not exit and perforate the rectum. This allowed controlled traction and manipulation around the sacral curve, resulting in an easy delivery (Fig. 1).

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A simple way to retrieve the gallbladder in '5-mm' laparoscopic cholecystectomy

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Background: The use of three 5-mm ports and one 10-mm umbilical port for laparoscopic cholecystectomy is becoming more popular.[1] This means that retrieval of the gallbladder has to be via the 10-mm umbilical port, which can be a potentially difficult problem, with a risk of port-site wound contamination, spillage of bile and gallstones. We recommend a simple and safe method for gallbladder extraction using a silk suture attached to the retrieval bag.

Method: We routinely perform '5-mm' laparoscopic cholecystectomy and use a BERT bag (bag for the endoscopic retrieval of tissue; Vernon-Carus, Preston, UK) to aid gallbladder retrieval via the umbilical port. A 1/0 silk is stitched securely to the corner of the bag and both ends are left long (Fig. 1). The bag, grasped with a pair of laparoscopic forceps, is introduced through the 10-mm umbilical port and positioned into the right upper quadrant. Both ends of the silk suture are left outside the abdomen. The gallbladder is placed into the bag. The BERT bag

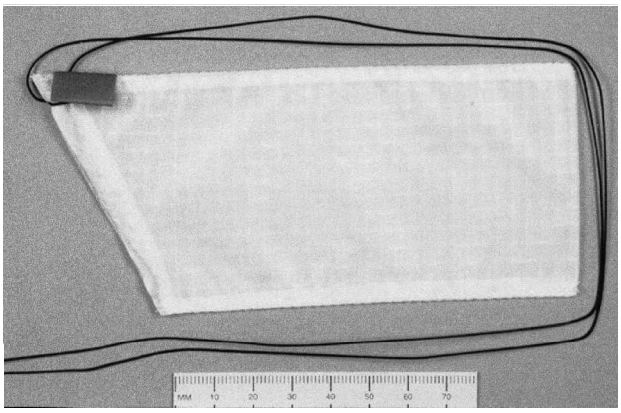

Figure 1 A prepared BERT bag with the silk suture tied to the corner of the bag.