Ileostomy and colostomy occlusion with digital tampon during laparotomy

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BACKGROUND

Performing surgery in the presence of a patent stoma can result in contamination of the peritoneal cavity and skin wounds, risking infection. Occlusion techniques include application of gauze or dressings, diversion of fluid with a Foley catheter and suture closure in the case of stoma reversal.¹ In 1994 Fischer described colostomy occlusion with applicator tampons in patients undergoing colostomy reversal.²

TECHNIQUE

Prepare the stoma and surrounding skin with alcoholic chlorhexidine. Insert an ultra-absorbent digital tampon using lubricant and cover with a waterproof transparent dressing. Prepare the operative field and cover with an antimicrobial incision drape. We employed this technique successfully in a patient undergoing an open cholecystectomy with a high output end ileostomy situated in the right upper quadrant, a second patient with a large calibre end colostomy undergoing a right hemicolectomy (Figs 1 and 2) and a third patient with a loop ileostomy undergoing a laparotomy for bowel obstruction (Fig 3). No contamination of the operative field occurred and the tampons were removed easily.

DISCUSSION

Ileostomy effluent contains around 50 million micro-organisms per gram and, like feculent colostomy fluid, it creates a source for infection once in contact with a surgical wound.³

Tampons are either inserted with an applicator or digitally. Digital tampons are manufactured by shaping a cellulosic fibrous pad into a

Figure 1 Digital tampon prior to insertion into large calibre end colostomy

Figure 2 Removal of tampon from end colostomy

Figure 3 Loop ileostomy packed with two digital tampons, covered with waterproof transparent dressing

cylindrical shape with longitudinal grooves. This design expands radially whereas applicator tampons expand in a more longitudinal direction,⁴ making digital tampons theoretically more suitable for the use described here. We suggest that using digitally inserted tampons is easy, cost effective, non-restrictive and successful, even in the more difficult cases of high output ileostomy and wide colostomy.

References

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