Diverting end stomas

The use of a diverting end stoma is sometimes required for palliation in advanced pelvic malignancy, and occasionally for uncontrollable perineal sepsis, complex fistulas or faecal incontinence. The procedure may be done by open laparotomy or by a laparoscopic technique.

A potential hazard of the laparoscopic procedure is the inadvertent closure of the proximal instead of the distal segment of bowel with resultant mechanical bowel obstruction.

Confusion as to the orientation of the bowel is more likely in the presence of adhesions, which may lead to rotation of the segment selected for the formation of the stoma, though the presence of adhesions is not necessarily a contraindication for the laparoscopic approach.

In forming a sigmoid colostomy (which is likely to give the best functional result in this situation) the orientation of the bowel can be confirmed by tracking the colon distally to the recto-sigmoid junction. If doubt still exists the introduction of a colonoscope or inflation of air via a rigid scope can clearly identify the distal segment. With formation of a transverse colostomy or ileostomy tracking of the bowel towards the ileo-caecal junction should ensure proper orientation.

It is possible for the bowel to become twisted as it is withdrawn through the stoma opening and the risk of this can be reduced by prior marking of the proximal and distal segment with diathermy. A further check can be made by re-introducing the laparoscope. The bowel can then be divided and the distal segment dropped back into the abdomen, or alternatively the bowel divided prior to withdrawal of the proximal segment.

If there is any doubt as to the anatomy using the laparoscopic technique this should be abandoned and the procedure completed by performing a laparotomy.

This potential hazard should be kept in mind if the stoma fails to function post-operatively and the situation clarified by imaging after introducing contrast into the stoma.

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