Technical Section

TECHNICAL NOTES & TIPS

TECHNICAL NOTES

Laparoscopic optical trocar insertion with umbilical traction suture

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BACKGROUND

Blind establishment of the pneumoperitoneum in laparoscopic surgery, via Veress needle or sharp trocar, can cause significant visceral and blood vessel injury. Open insertion using a blunt trocar (Hasson's technique) is significantly safer.¹ However, this remains time consuming and frequently results in gas leak. Optical trocars have been proven to be a rapid and safe alternative, allowing direct visualisation of the abdominal wall layers as they are traversed.² Optical trocar manufacturers suggest pinching the supra-umbilical skin to provide countertraction during insertion, but this causes significant bruising. Stay sutures in the rectus sheath have been suggested, but significant dissection is still required.³ Furthermore, instruments applied to the umbilicus frequently slip off causing unsightly skin trauma. We describe an alternative, non-invasive technique.

TECHNIQUE

Before insertion of the optical trocar, a heavy braided suture is placed through the umbilical cicatrix and clipped, allowing elevation of it and the underlying rectus sheath. This provides countertraction against the advancing trocar whilst also lifting the abdominal wall away from the underlying viscera. The optical trocar is then inserted in the usual fashion, with care being taken to note entry to the peritoneal cavity.

DISCUSSION

We have used this technique in 10 patients to date and find it to be both rapid and safe. The stable countertraction means less force is required to advance the trocar with a resultant decreased

chance of internal injury. Time-consuming dissection to the rectus sheath is avoided.

References

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Safe and simple trephine loop colostomy

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BACKGROUND

Faecal incontinence, severe peri-anal Crohn's disease and unresectable rectal cancer commonly require temporary or definitive intestinal diversion via stoma formation.¹ To minimise surgical impact, techniques such as trephine colostomy² and laparoscopic stoma formation^{1,3} have been devised.

Trephine colostomies can be technically difficult due to limited access. Hazards include incorrect identification of the sigmoid colon, torsion, orientation, difficult mobilisation and thus conversion to laparotomy and stoma retraction.² We describe a technique for a simple and safe trephine colostomy.

TECHNIQUE

The stoma site is pre-operatively marked. Under anaesthetic, the surgeon inserts a flexible sigmoidoscope and transilluminates to gain an impression of the mobility and location of the sigmoid colon. The stoma site is determined after considering the pre-operative