containing the appendicolith, and a guidewire is introduced. Sequentially larger dilators are passed over the guidewire to create a track capable of accommodating a 5mm blunt laparoscopic port. Under ultrasonography guidance, a laparoscopic sucker is used to extract the appendicolith via the port and irrigate the abscess cavity.

DISCUSSION

This minimally invasive technique was used to successfully treat a retained appendicolith and persistent intra-abdominal sepsis in a single patient following a laparoscopic appendicectomy. Retained appendicoliths and their sequelae are often diagnosed in the first few weeks postoperatively when further open surgical exploration is most difficult. The use of ultrasonography guidance and laparoscopic instruments obviates the need for this. The port acted as a smooth conduit for the appendicolith to be extracted in. As an alternative to a laparoscopic sucker, a laparoscopic grasper or Dormia basket may also be used to extract the appendicolith. With ultrasonography expertise to guide the procedure, the authors advocate this technique as an option for the management of retained appendicoliths.

Reference

1. Singh AK, Hahn PF, Gervais D *et al.* Dropped appendicolith: CT findings and implications for management. *Am J Roentgenol* 2008; **190**: 707–711.

An atraumatic muscle splitting incision for port placement prior to robotic assisted laparoscopic partial nephrectomy

MA Omar, O Karim

Heatherwood and Wexham Park Hospitals NHS Foundation Trust, UK

CORRESPONDENCE TO

Mohammad Omar, E: surgeonmao@yahoo.com

BACKGROUND

Robotic assisted laparoscopic partial nephrectomy through a transperitoneal approach requires strategically placed small incisions for insertion of the robotic ports. The camera port is placed through the rectus abdominis muscle above the umbilicus. We describe a technique for splitting the muscle with minimal trauma.

TECHNIQUE

The skin is incised along Langer's line over the belly of the rectus abdominis muscle. The anterior rectus sheath is incised transversely. The two margins of the sheath are anchored and ligated with a size 1 polyglactin suture on a J needle. These sutures are used subsequently to secure the camera port (Fig 1).

A Langenbeck retractor is advanced bluntly through the muscle, rotating the blade of the retractor to split the muscle fibres. A second Langenbeck retractor is 'spooned' over the first in the same split of the muscle fibres (Fig 2). This second retractor is now rotated through 180°; (Fig 3) and the retractors are pulled apart gently to expose the posterior rectus sheath (Fig 4). Forceps and scissors are

Figure 1 The anterior rectus sheath is incised and the margins are anchored with a suture.

Figure 2 A second Langenbeck retractor is 'spooned' over the first retractor.

Figure 3 The second Langenbeck retractor is rotated through 180°.

Figure 4 The two retractors are held apart to expose the posterior rectus sheath.

used to pick up and incise the posterior rectus sheath and the parietal peritoneum. The port is screwed into place with the polyglactin stay sutures fixed over its wings.

DISCUSSION

This simple technique of spooning the Langenbeck retractors over each other through the same split in the muscle fibres provides an avascular, relatively atraumatic technique for placement of the robotic camera port. The technique may be used for other laparoscopic procedures where a port needs to be placed through the rectus muscle.

A rapid and reliable technique for emergent, decompressive colostomy

DP Toomey

Hull and East Yorkshire Hospitals NHS Trust, UK

CORRESPONDENCE TO

Desmond Toomey, E: toomey.des@gmail.com

BACKGROUND

Megacolon complicating another illness and closed loop colonic obstruction are surgical emergencies. These debilitated patients have high surgical risk.¹ A technique for rapid, decompressive colostomy is described.

TECHNIQUE

The skin is incised (4–6cm) transversely over the right upper rectus abdominis muscle. A cruciate opening is made in the anterior rectus sheath, the muscle split at the junction of its lateral and middle thirds, and the posterior sheath and peritoneum opened. A small

Alexis® (Applied Medical, Rancho Santa Margarita, CA, US) retractor is positioned in this incision. The proximal transverse colon, identified by the omentum, is delivered. The omentum can be fenestrated or the bowel needle decompressed if required. The mesocolon is pierced with a haemostat, and a Foley catheter drawn around the bowel and clipped. The colon is reduced into the abdomen and the retractor removed over the catheter. The fascial defect occasionally needs suture plication. Traction on the catheter safely delivers the bowel again. A stoma bridge, inserted into the catheter's open end, is guided through the mesocolon without injury. The loop colostomy is opened as usual.

DISCUSSION

This technique ensures adequate access to deliver the colon and form a snug stoma without any other incisions. The procedure takes approximately 25 minutes. The stoma is made to the right of the middle colic artery so as not to jeopardise future colorectal anastomosis. It is especially useful for debilitated patients who would not tolerate a midline laparotomy and for malignant disease that requires specialist expertise (that is not immediately available), further staging or neoadjuvant treatment.²

References

1. Biondo S, Parés D, Frago R *et al.* Large bowel obstruction: predictive factors for postoperative mortality. *Dis Colon Rectum* 2004; **47**: 1,889–1,897.
2. Grundmann R. Primary colon resection or Hartmann's procedure in malignant left-sided bowel obstruction? The use of stents as a bridge to surgery. *World J Gastrointest Surg* 2013; **5**: 1–4.

Painless removal of suction drains

RH Hutchinson¹, G Salem²

¹Gateshead Health NHS Foundation Trust, UK

²Spire Cheshire Hospital, UK

CORRESPONDENCE TO

Richard Hutchinson, E: rhutch@doctors.org.uk

Suction drains are used across many surgical specialties and can be a helpful route for delivering postoperative anaesthesia.¹ Patients commonly complain of pain on removal of such drains, some stating it is the most uncomfortable part of their surgical experience.

With the exception of cranial, spinal, pericardial and intra-articular drains, delivering ropivacaine (2mg/kg) directly into the drainage tube a few minutes prior to removal gives safe and excellent analgesia. This also delivers local anaesthetic directly to the operative site around 24 hours after the procedure, enabling more effective physiotherapy and mobilisation with potential for shorter inpatient stays.

Reference

1. Kambam JR, Hammon J, Parris WC, Lupinetti FM. Intrapleural analgesia for post-thoracotomy pain and blood levels of bupivacaine following intrapleural injection. *Can J Anaesth* 1989; **36**: 106–109.