Technical Section [TECHNICAL NOTES AND TIPS

A novel method for practising local skin flaps

N Ibrahim, I Chauhan, S Varma

Leicester Royal Infirmary, Leicester, UK

CORRESPONDENCE TO

Ibrahim Nader, E: nader.ibrahim@doctors.org.uk
doi 10.1308/rcsann.2016.0252

Designing and utilising local flaps is a daunting skill for plastic surgery trainees. The ability to decipher the geometrical conundrum posed by local flaps is a fundamental skill, gained only through experience. With changes in training, and flap design courses costing in the order of £500–£1000, the need to find novel learning opportunities is increasingly paramount. We describe a simple, inexpensive method of practicing the design and execution of local flaps on excess tissue during breast reconstruction.

TECHNIQUE

Using the deep inferior epigastric perforator or transverse rectus abdominis myocutaneous free flap for unilateral breast reconstruction

Figure 1 A trainee practising C–V flap design and construction in theatre, using excess surgical equipment and suture material

typically results in the disposal of excess abdominal tissue. Abdominal skin, and subcutaneous fat are a realistic medium on which to practice flap design and construction ie Rhomboid flaps and C-V flaps for nipple reconstruction.

While still in theatre but using equipment and suture material that is no longer in use, the flap can be secured to a sterile trolley, and flap designs can be mapped around a fabricated lesion (Fig 1).

DISCUSSION

This technique offers a realistic and cost-neutral method for practicing local skin flaps while in theatre. The patient can be consented for the use of their excess abdominal tissue on a separate consent form. The tissue is then used for the duration of the procedure and not stored, and then disposed of in the usual manner. This provides an opportunity to supplement surgical portfolios through simulated work-based assessments.

A porcine model for teaching laparoscopic appendicectomy

SG Goddard, N Warren

Welsh Institute for Minimal Access Therapy, Cardiff University
School of Postgraduate Medical and Dental Education,
Cardiff, UK

CORRESPONDENCE TO

Stuart Goddard, E: goddardsg@cardiff.ac.uk
doi 10.1308/rcsann.2017.0136

BACKGROUND

Synthetic models for teaching appendicectomy lack the realism afforded by the 'feel' of real tissue. Our low-cost, porcine-based model aligns more closely with real laparoscopic appendicectomy because it is responsive to the application of surgical energies.

TECHNIQUE

Porcine tissue used to construct the appendix comprises an approximately 20-cm colon segment and a 7-cm segment of fallopian tube with mesosalpinx. The colon is inverted and ligated approximately 1 cm from the edge of one end. Eversion reshapes this into a caecal bulge. A perforation is created adjacent to the caecum and the fallopian tube is pulled into the lumen using long curved forceps, leaving about 5 cm of length outside, with the mesosalpinx. In low moisture, industrial superglue (CYN20, 100 cps viscosity, available from Ever-build Ltd. Leeds, UK) is used to spot-glue the base of the tube to the colon together with a single interrupted stitch here to safeguard against evulsion, while the mesosalpinx is spot-glued distally along the side of the lumen from the base (simulating the mesoappendix). The open distal tip of the fallopian tube is pinched closed with glue (Fig 1).

Figure 1 Staged model-building process

DISCUSSION

This model has been used in the Royal College of Surgeons Core Skills in Laparoscopic Surgery course since its regional inception as an alternative to costly synthetics and cheaper, glove-based alternatives, which suit non-formal continuing training.^{1,2} Also used within the College Clinical Skills in Emergency Surgery course, it is mounted over a patient return electrode and set on a corkboard with board pins, enabling electrosurgical dissection. Mechanical vibration devices and laparoscopic scissors can also be used to dissect the mesosalpinx.

References

1. Oliver JC, Carty NJ, Wakefield C. Low-cost model for laparoscopic appendectomy in a webcam simulator. *Bull R Coll Surg Engl* 2010; **92** (4): 122–125.
2. Shingler G, Ansell J, Goddard S *et al*. Piloting the ISCP Surgical Skills Assessment: the Wales Deanery experience. *Bull R Coll Surg Engl* 2013; **95** (1): 1–4.

Increased safety of surgical glove application: the under/over method

PH Sugarbaker

Center for Gastrointestinal Malignancies, Program in Peritoneal Surface Oncology, MedStar Washington Hospital Center, Washington, DC, USA

CORRESPONDENCE TO

Paul H Sugarbaker, E: Paul.Sugarbaker@medstar.net
doi 10.1308/rcsann.2017.0145

INTRODUCTION

Surgical gloves are a necessity when performing abdominal surgery not only to protect the patient from bacterial contamination but also to protect the surgeon and surgical assistants from biological fluids. One site for interruption of the barrier between biological fluids in the open abdomen and the surgeon is the interface of the surgical gown and the surgical gloves at the wrist. In the under/over method for double-glove application, the first pair of gloves are positioned under the surgical gown (Figs 1 and 2) and the second pair are positioned over the cuff of the surgical gown and secured with self-adherent wrap (Figs 3 and 4). The under/over method prevents contact of the cuff of the surgical gown with the wrist skin and reduces the possibility of exposure of the surgeon to biological fluids during abdominal surgery.

Figure 1 After the surgeon scrubs and dries their hands, the first pair of surgical gloves (under gloves) are applied and the upper part of the glove advanced to the lower forearm.

Figure 2 The surgical gown is put on and care is taken to advance the cuff of the surgical gown only to the level of the upper palm/lower wrist.