Rönkä K, Vironen J, Kössi J, Hulmi T, Silvasti S, Hakala T *et al.* Randomized multicenter trial comparing glue fixation, self-gripping mesh, and suture fixation of mesh in Lichtenstein hernia repair (FinnMesh Study). *Ann Surg* 2015; **262**: 714–720.

The duration of surgery was 34 min with glue, 32 min with self-gripping and 38 min with sutured mesh (P < 0·001). There were no differences in postoperative pain, analgesic requirement, complications or quality of life.

Gough AE, Chang S, Reddy S, Ferrigno L, Zerey M, Grotts J *et al.* Periprosthetic anesthetic for postoperative pain after laparoscopic ventral hernia repair. A randomized clinical trial. *JAMA Surg* 2015; **150**: 835-840.

Eighty patients were allocated to saline or long-acting local anaesthetic injected between the mesh and the peritoneum. Postoperative pain was reduced by the local anaesthetic for up to 12 h (P = 0·01).

Czarnetzki C, Elia N, Frossard J-L, Giostra E, Spahr L, Waeber J-L *et al.* Erythromycin for gastric emptying in patients undergoing general anesthesia for emergency surgery. A randomized clinical trial. *JAMA Surg* 2015; **150**: 730-737.

Some 137 patients were allocated randomly intravenous erythromycin 15 min before endotracheal intubation. Erythromycin improved the chance that the stomach was empty on intubation (as assessed by endoscopy): 80 versus 64 per cent. It also increased gastric pH from 2 to 6 (P = 0·002).

Müller-Stich B, Linke G, Senft J, Achtstätter V, Müller P, Diener M *et al.* Laparoscopic mesh-augmented hiatoplasty with cardiophrenicopexy *versus* laparoscopic Nissen fundoplication for the treatment of gastroesophageal reflux disease: a double-center randomized controlled trial. *Ann Surg* 2015; **262**: 721–727.

Nissen fundoplication was more effective in this study that included 90 procedures. It was associated with better indigestion scores (P = 0·03) and reflux scores (P = 0·004) after surgery. Dysphagia scores and quality of life were similar.

Bingener J, Skaran P, McConico A, Novotny P, Wettstein P, Sletten DM *et al.* A double-blinded randomized trial to compare the effectiveness of minimally invasive procedures using patient-reported outcomes. *J Am Coll Surg* 2015; **221**: 111–121.

Some 110 patients were included in a trial comparing single-port with standard four-port laparoscopic cholecystectomy. There were minimal differences in subsequent quality-of-life scores.

Lurje G, Raptis DA, Steinemann DC, Amygdalos I, Kambakamba P, Petrowsky H *et al.* Cosmesis and body image in patients undergoing single-port *versus* conventional laparoscopic cholecystectomy: a multicenter double-blinded randomized controlled trial (SPOCC-trial). *Ann Surg* 2015; **262**: 728–735.

There were no differences in the rates of complications or duration of hospital stay in this study that included 110 patients. The single-port procedure improved postoperative pain (P = 0·005), and cosmesis scores at 12 weeks and 1 year (P < 0·001).

Honda M, Hiki N, Nunobe S, Ohashi M, Kumagai K, Hashimoto Y *et al.* Preoperative *vs* postoperative eradication of Helicobacter pylori in 150 patients with gastric cancer: a randomized controlled trial. *J Am Coll Surg* 2015; **221**: 273–279.

Eradication rates were similar with preoperative (68·6 per cent) or post-operative (69·4 per cent) antibiotics in this study that included 142 procedures.

Gotohda N, Yamanaka T, Saiura A, Uesaka K, Hashimoto M, Konishi M *et al.* Impact of energy devices during liver parenchymal transection: a multicenter randomized controlled trial. *World J Surg* 2015; **39**: 1543-1549.

Use of an energy device made the transection part of the surgery quicker (63 versus 84 min, P < 0·001) in this study that included 211 procedures. It also reduced major blood loss (P = 0·025) and postoperative bile leak (P = 0·002).

Stone P, AbuRahma, AF, Campbell JR, Hass S, Mousa AY, Nanjundappa A *et al.* Prospective randomized double-blinded trial comparing 2 anti-MRSA agents with supplemental coverage of cefazolin before lower extremity revascularization. *Ann Surg* 2015; **262**: 495–501.

The study included 178 patients undergoing bypass surgery. The addition of either vancomycin or daptomycin to standard cephalosporin prophylaxis had a similar effect: surgical site infection rates of 8·2 and 11·8 respectively. Vancomycin appeared to reduce the rate of Gram-positive bacterial infections.

O'Reilly EA, Prichard RS, Al Azawi D, Aucharaz N, Kelly G, Evoy D *et al.* The value of isosulfan blue dye in addition to isotope scanning in the identification of the sentinel lymph node in breast cancer patients with a positive lymphoscintigraphy: a randomized controlled trial (ISRCTN98849733). *Ann Surg* 2015; **262**: 243–248.

The addition of blue dye did not affect the number of nodes removed (P = 0·3) or the number of positive nodes identified: 23·8 versus 22·1 per cent in dye or no dye groups respectively.

The trials listed here are added to the Scientific Surgery Archive, which contains all randomized clinical trials in surgery that have been identified by searching the top 50 English language medical journal issues since January 1998. The archive, which is fully searchable, can be found on the *BJS* website (www.bjs.co.uk) together with other useful features for surgeons such as Instructions to Authors, EarlyView of accepted articles and online Your Views.

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