

**PTU-223 CONVERSION TO OPEN SURGERY FROM LAPAROSCOPY: TO 'TRY AND FAIL' OR 'NOT TRY AT ALL'?**

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**Introduction** Clarification as to whether conversion to open surgery during laparoscopic colectomy leads to adverse clinical outcomes when compared to laparoscopic surgery that is completed will help establish if the minimally invasive approach should routinely be attempted in most instances with open surgery reserved for only when this were to fail.

**Method** The National Surgery Quality Improvement Program 2012 database was used for analysis of patients who underwent laparoscopic colectomy. Patients were categorised into those who completed laparoscopic procedures, who had laparoscopic procedures with conversion to open, and who had open procedures. Analysis was carried out using chi-squared test, fisher exact test, and logistic regression.

**Results** Of the 16,648 patients included, 7409 (44.50%) underwent open surgery. Of the 9239 who underwent laparoscopic colectomy, 1147 (12.41%) had conversion to open procedure. Strongest association with conversion was found with emergency procedures, preoperative sepsis and septic shock. The other associated factors were male sex, history of CHF, COPD, hypertension, steroid use and disseminated cancer. Post-operatively, compared to the patients who had laparoscopic procedure those who had conversion to open procedure had a higher risk of surgical and medical complications (see Table 1). However, when compared to patients who completed open surgery straightaway, patients who had conversion to open surgery had a higher risk for superficial SSI. While other complications were comparable to open surgery, converted patients had a lower risk of post-operative pneumonia, re-intubation, need for ventilation > 48 h, bleeding that required transfusion, sepsis, septic shock and return to the operating room.

**Abstract PTU-223 Table 1**

	LC with open conversion vs. LC			LC with open conversion vs. Open		
	OR	95% CI	p-value	OR	95% CI	p-value
Superficial SSI	2.86	2.33–3.51	<0.0001	1.529	1.26–1.86	<0.0001
Post-op Pneumonia	2.29	1.52–2.45	<0.0001	0.57	0.39–0.83	0.003
Unplanned Re-intubation	2.62	1.72–4.00	<0.0001	0.58	0.39–0.84	0.004
Ventilator > 48 hrs	2.89	1.92–4.35	<0.0001	0.32	0.23–0.46	<0.0001
Bleeding Transfusion	2.96	2.44–3.60	<0.0001	0.61	0.51–0.72	<0.0001
Sepsis	2.00	1.49–2.69	<0.0001	0.75	0.56–0.99	0.04
Septic Shock	3.27	2.11–5.05	<0.0001	0.43	0.30–0.63	<0.0001
Return to OR	1.55	1.18–2.02	0.0013	0.76	0.59–0.98	0.04

**Conclusion** While patients who have open conversion have worse outcomes than those who complete laparoscopic colectomy, outcomes for converted patients are not significantly worse than for comparable patients who undergo open surgery straightaway. Considering the benefits of the minimally invasive approach, laparoscopic colectomy may reasonably be attempted

in any patient, even when completion may not be assured, with conversion reserved for when this is not feasible.

**Disclosure of interest** None Declared.

**PTU-224 INTERNATIONAL EXPERT CONSENSUS ON ENDPOINTS FOR FULL-THICKNESS LAPAROENDOSCOPIC COLONIC EXCISION**

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**Introduction** Full-thickness laparoendoscopic excision has been reported for complex, endoscopically unresectable colonic polyps. However, the endpoints used in these studies vary significantly and therefore making definitive conclusions regarding the novel procedure would be improved if a common data set were adopted. This study sought to define most appropriate endpoints that should be measured and reported for research on full-thickness laparoendoscopic excision of colonic polyps.

**Method** A web-based Delphi questionnaire was developed following a systematic literature search for reported endpoints. Outcomes were grouped into general, complication, technical and histopathology endpoints. International specialists in laparoscopic surgery, endoscopy, transanal endoscopic microsurgery and gastrointestinal pathology were invited to participate. The questionnaire required prioritisation of outcomes on a 5-point Likert scale. Respondents were then sent a second questionnaire containing feedback on scores from Round-1 and asked to re-prioritise outcomes based on the feedback received to identify a final core outcome set.

**Results** 33 (75% response rate) participants from 11 countries completed the round 1 Delphi of 28 proposed endpoints and all completed the second round. Eight endpoints were rated the most important to stakeholders within the four domains – reoperation (general); anastomotic leak, mortality (complications); secure closure of the excision site, macroscopic completeness of excision (technical), presence of cancer, clearance of resected margins and en-bloc specimen production (histopathology).

**Conclusion** This study has developed a provisional consensus on a minimum number of feasible and clinically meaningful outcomes measures to use in studies of full-thickness laparoendoscopic excision of colonic polyps. Widespread adoption will allow better reporting of the technique and more efficient development in clinical practice.

**Disclosure of interest** None Declared.

**PTU-225 STRATEGIES TO IMPROVE RESPONSE RATES TO PATIENT REPORTED OUTCOME MEASURES IN A SURGICAL RCT**

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**Introduction** Difficulties achieving high response rates to patient reported outcome measures (PROMs) within clinical research are well recognised. The eTHoS trial, which compares Stapled Haemorrhoidopexy with Traditional Haemorrhoidectomy for the treatment of grade II-IV haemorrhoids, is no exception.

Early response rates to postal PROMs on quality of life (distributed at 12 and 24 months post-randomisation) showed that their return was respectively only 67% (112/166) and 45% (5/11). Monetary incentives may improve such responses.<sup>1</sup> High value incentives may have a greater overall effect than lower value incentives,<sup>2</sup> however evidence from RCTs is limited.

We examined whether introducing monetary incentives affected response rates from subsequent postal PROMs in a subset of the eTHoS cohort.

**Method** Two studies were conducted. In the first (which began in June 2013), participants (n = 326) were randomly allocated to one of 4 groups: 1) no incentive; 2) £5 gift voucher enclosed with 12 and 24 month questionnaires; 3) £5 gift voucher at 12 months only; 4) £5 gift voucher at 24 months only.

In the second, participants are sent a £30 gift voucher on receipt of completed questionnaires (12 and /or 24 months). This study began in October 2014 and is expected to run until end of eTHoS follow up (June 2016). At the time of study design (July 2014), the 24 month postal PROMs response rate was 60% (with 440 patients yet to reach 24 months).

Primary analyses for our first study examined effects of a £5 gift voucher incentive at 12 and/or 24 months on response rates to postal PROMs. A secondary analysis will examine a non-randomised comparison on response rates of incentives vs. no incentives. For study 2, primary analyses will examine the effect of a £30 gift voucher at 12 and/or 24 months on questionnaire response rates.

The trial team also employed traditional methods in an attempt to improve postal response rates including implementing a shortened reminder questionnaire, database provision to allow participants to complete questionnaires online, and administering a study newsletter one week before the 12 and 24 month PROMs were due.

**Results** Study1 ceased in October 2014 as there appeared to be little benefit; response rates at 12 months remained lower than expected, 77% (267/347) and at 24 months, 66% (75/113).

**Conclusion** Further data showing secondary analysis results and preliminary outcomes from our second study will be presented (strategies employed in the eTHoS trial which aimed to boost response rates will be discussed).

**Disclosure of interest** None Declared.

## REFERENCES

- 1 Edwards PJ, et al. *Cochrane Database of Syst Rev* 2009:MR000008
- 2 Brueton V, et al. *Cochrane Database Syst Rev* 2013:MR000032

## PTU-226 PROSPECTIVE OBSERVATIONAL COHORT STUDY OF LAPAROSCOPIC VERSUS OPEN EMERGENCY STOMA FORMATION

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**Introduction** Emergency general surgery is a huge clinical service, with over a third of admissions secondary to colorectal

pathology, including diverticular disease, colorectal malignancy and inflammatory bowel disease. This cohort of patients often requires surgical intervention with the formation of a stoma. There has been a steady rise in the use of laparoscopic surgery (LS) in the emergency colorectal surgery. The aim of this study is to investigate the role of LS in the colorectal emergency requiring a stoma.

**Method** A prospective observational cohort study was conducted between March 2013 and June 2014. All adult patients (>18 years old) undergoing an emergency operation as defined by NCEPOD guidelines resulting in the formation of a stoma were included. Data was analysed using SPSS version 22.

**Results** A total of 77 patients were identified, with 23 (29.9%) in LS group and 54 (70.1%) in the open surgery (OS) group. Conversion rate was 13%. Forty-two (54.5%) ileostomies and 35 (45.5%) colostomies were constructed. LS was associated with reduced morbidity and median length of stay.

Abstract PTU-226 Table 1

Variable	Laparoscopic	Open	P Value
30 day post-operative morbidity	11 (14.3)	32 (41.6)	0.02
30 day post-operative mortality	0 (0)	4 (5.2)	0.18
Clavien-Dindo Classification			
I			
II	8 (10.4)	8 (10.4)	
III	3 (3.9)	20 (20.6)	
IIIa	0 (0)	1 (1.3)	0.05
IIIb	0 (0)	2 (2.6)	
IV	1 (1.3)	4 (5.2)	
IVa	0 (0)	0 (0)	
IVb	1 (1.3)	4 (5.2)	
V	0 (0)	1 (1.3)	
	0 (0)	4 (5.2)	
Stoma-Specific Complications	5 (6.5)	4 (5.2)	0.07
Re-operative rates	3 (3.9)	5 (6.5)	0.61
Median Length of Stay	9	14	0.02

**Conclusion** Emergency LS is a feasible and effective option in the colorectal emergency requiring a stoma, with improved clinical outcomes over OS.

**Disclosure of interest** None Declared.

## PTU-227 STATINS MAY MODIFY COLORECTAL ANASTOMOTIC LEAK RISK IN HIGH RISK PATIENTS

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**Introduction** Anastomotic leak is one of the most feared complications of colorectal surgery, as it is associated with increased morbidity and mortality, need for a permanent stoma and recurrence of cancer. Statins are amongst the most commonly prescribed drugs in the developed world. Patients taking statins would be expected to have comorbidities associated with an increased risk of anastomotic leak. A small number of studies investigating the effect of statins upon anastomotic leak have yielded conflicting results. Statins are known to affect the inflammatory response, white cell function, endothelial function and angiogenesis, all of which are fundamental to tissue healing;