Methods: A comprehensive literature review identified studies reporting the incidence of incisional hernias following closure of ileostomies or colostomies. Studies including children, trauma as an indication for stoma construction and non-English language studies were excluded. Available unpublished data was included.

Results: 25 studies were included, providing outcomes for 1,783 closed stomas. The overall hernia rate was 7.2% (129/1783) but with a wide range between different studies (0-48%). Loop ileostomies formed the largest proportion of stoma reversals with a hernia rate of 4.7% (52/1102). Loop colostomies formed the next largest group, with a hernia rate of 10.8% (52/480). 22 studies reported clinical rates of hernias, whereas only three studies reported imaging rates. One reported findings from ultrasound scans (32.3%, 10/31), one from CT scans (47.8%, 11/23) and one from CT and MRI (33.3%, 20/60). Ten studies provided data on hernias requiring re-operations was extracted from ten studies, showing a 23.0% (163/53197) rate.

Conclusion: Incisional hernias are commoner following colostomy than ileostomy closure. Reported clinical rates are likely to significantly underestimate true incidence, as identified by ultrasound and CT imaging.

0866 MORBIDITY FOLLOWING COMPLEX EVAR
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Objectives: Patterns of morbidity are poorly characterized for patients undergoing complex EVAR. Evidence for complex endografts is based on case series and morbidity is often poorly reported. Multi organ dysfunction is described but the pathological events triggering this are uncertain. We hypothesised that early postoperative cardiac morbidity occurs as part of multi-organ dysfunction rather than as an isolated ischaemic event.

Methods: A prospective analysis of 41 patients undergoing complex EVAR was undertaken. Primary endpoint was development of cardiac morbidity, on postoperative day 3.

Results: 8 patients underwent thoracoabdominal, 29 juxtarenal fenestrated and 4 iliac branched graft AAA repair. There were 5 deaths, 3 of which were in emergency cases. The most common postoperative morbidities on day 5 were renal (50% of inpatients), respiratory (44%), gastrointestinal (25%) and cardiac (19%). Occurrence of cardiac morbidity on day 3 was associated with increased total morbidity on days 3, 5, 8 and 15 (P<0.04).

Conclusions: Complex EVAR patients suffer non-cardiac morbidity in line with major non-vascular surgery. Early postoperative cardiac morbidity is associated with multi-organ dysfunction in this population indicating a more global pathology. This highlights the need for further study into the aetiology of cardiac injury in this group.

0869 THE ROLE OF INPATIENT FLEXIBLE SIGMOIDOSCOPY FOR INVESTIGATING ACUTE BLEEDS PER RECTUM (PR) AT A DISTRICT GENERAL HOSPITAL (DGH).
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Aim: To investigate role of inpatient flexible sigmoidoscopy in patients presenting with acute PR bleeds.

Method: Case notes of all patients investigated by inpatient flexible sigmoidoscopy for PR bleeds between 1st December 2008 and 28th February 2010 were reviewed retrospectively.

Results: 74 patients (40% male, 60% female), median age 74 years (20-97), were identified. Median time from admission to procedure was 2.7 days (0.5-18). The procedure was incomplete in 58% (n=43) due to inadequate bowel preparation (70%), patient discomfort (16%) and anatomy (9%). Flexible sigmoidoscopy diagnosed colitis (22%), diverticulardisease (20%), haemorrhoids (14%), and tumour (4%). Diagnosis was unclear in 22% and normal in 26%. 28 biopsies were taken which demonstrated rectal cancer (3), colitis (10), Proctitis (4), normal (7) and others (4). All 3 rectosigmoid cancers were diagnosed with CT scan before histological confirmation.

Further investigations were done (60% inpatients, 38% outpatients), including completion colonoscopy and CT abdomen. Follow-up colonoscopy detected 3 colonic cancers initially missed on flexible sigmoidoscopy.

Conclusion: Flexible sigmoidoscopy has a completion rate less than 40%. 50% of cancers, 31% diverticulardisease and 25% of colitis were missed on initial flexible sigmoidoscopy. The diagnostic role of inpatient flexible sigmoidoscopy in acute PR bleed should be questioned.

0870 HAS THE INCREASING USE OF DIAGNOSTIC TOOLS REDUCED THE NEGATIVE APPENDICECTOMY RATE?
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Aims: Misdiagnosis of appendicitis can lead to unnecessary surgery. The potential of diagnostic tests to inform decision-making regarding the diagnosis of appendicitis has long been debated. This study examined the trends in appendicectomy following increased utilisation of diagnostic tests.
Methods: A prospectively collected database from a District General Hospital was interrogated, identifying patients who underwent appendicectomy within two time frames (1999 & 2009). Notes were examined for key history & examination findings, investigations, operative & post-operative details, including histological findings.
Comparing these groups, there were 63 appendicectomies in 2009 compared with 93 in 1999 (32% reduction). There were no significant differences between groups in terms of age or sex ratio.

Results: Both cohorts showed no discriminating clinical signs or symptoms which were useful in differentiating between histological findings. The usage of pre-operative CRP increased from 16.1% to 100%. The use of CT performed also rose from 8.6% to 14.3%. There was increased utilisation of diagnostic laparoscopy from 4 in 2000 (4.3%) to 28 in 2010 (44.4%). Overall negative appendicectomy rates fell from 19.4% to 12.7%.

Conclusion: Although clinical acumen has long been determined the arbiter of appendicitis, this study appears to show that diagnostic tests alone have altered the negative appendicectomy rate.

0878 THE POTENTIAL DANGERS OF THE LONDON CYCLE HIRE SCHEME
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Aims: The Mayor of London introduced a bicycle hire scheme in July 2010. Since its introduction many novice cyclists have taken to the streets of London. According to the Royal Society for the Prevention of Accidents 3,674 cyclists were injured or killed in London in 2009. Many of the users enjoy the convenience and nature of the scheme and do not use safety precautions whilst using the bicycles. This study was conducted to assess the use of helmets and safety precautions in cyclists in the capital. The study aimed to compare cyclists with those using the cycle hire bikes with other cyclist. The study was conducted at random locations, times and weather conditions in a two month period in London.

Method: Over 650 cyclists were observed at 10 London locations.

Results: Only 33% of cyclist using the hire bikes wore helmets compared with 70% of other cyclist, showing a statistical difference between the groups (p<0.01).

Conclusion: A study in the US found that riders with helmets have an 88% reduction in their risk of brain injury. The authors’ advocate that more should be done to improve the safety of the cycle hire scheme. The users should become more aware of the life-saving benefits of helmets.

0888 USE OF BIBORANE IN CHILDREN
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