**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 Available unpublished data was included.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.

# 0861 WORKPLACE BASES ASSESSMENTS: WELSH CORE SURGICAL TRAINEES' PERSPECTIVE

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**Introduction:** Work Place Based Assessments (WPBA) serves as a formative assessment tool, and allows for 'triangulation of evidence' to judge the abilities of a trainee. There is very little evidence in literature regarding the views of trainees regarding WPBA, and its relevance to their training. The aim of this study was to explore this further.

**Methods:** A semi-structured questionnaire survey was carried out among the Year 1 CSTs (Core Surgical Trainees) in the Wales Deanery.

**Results:** 26 CST1s participated in the study. 62% had received training about using WPBA. Only 19% felt that WPBA contributed to their surgical training. 40% agreed that WPBA served as an educational tool. Majority of the trainees (73%) felt that WPBA were difficult to organise, and attributed this to lack of time and enthusiasm among the assessors. Only 15% were in favour of retaining WPBA in the current format, as majority felt that WPBA was not a true reflection of their clinical abilities.

**Conclusion:** The educational value of the WPBA is undermined by a lack of awareness of its role, both among the assessors and assessees. Creating dedicated time slots, and having a 'cohort of trainers with an educational interest' can improve the assessment process.

# 0863 INVESTIGATION OF SYMPTOMATIC CAROTID ARTERY STENOSIS: IS CONFIRMATORY IMAGING NECESSARY IN ALL CASES?

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**Purpose:** Evidence mandates intervention for symptomatic carotid disease within two weeks. Confirmatory imaging may delay treatment. We studied whether duplex alone is diagnostic.

**Materials and Methods:** All symptomatic patients with dual imaging from September 2008-2009 were included. Data from primary duplex images, including degree of stenosis by NASCET peak systolic velocity criteria, were compared with confirmatory MRA/CTA reports. Groups were stratified by degree of ipsilateral and contralateral stenosis.

**Results:** 124 patients underwent dual imaging, median age 69 years (range 45-87). Twenty-two patients (18%) had unilateral 70-99% stenosis. Secondary imaging agreed in all cases (PPV) 100%). Duplex identified 17 carotid occlusions (13%); all but one confirmed on secondary imaging (PPV 94%). Twenty-three cases had unilateral 50-69% stenosis; seven were confirmed (PPV 30%). Sixteen patients had 50-99% stenosis with normal velocities; three had significant stenosis on further imaging (19%). Nine patients had 70-99% stenosis with contralateral 50-99% stenosis; eight were confirmed. Median waiting time for confiration was 6 days (range 0-180). **Conclusion:** Confirmatory imaging may not be required with unilateral 70-99% stenosis. Secondary imaging may be indicated for carotid occlusion when

a scan is not diagnostic, 50-69% stenosis or for those based upon grayscale measurements alone. Confirmatory imaging may sometimes be unnecessary.

#### 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=.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%), diverticular disease (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% diverticular disease 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.