Aims: To identify and measure the surgical learning curve of single-port appendicectomy comparing the performance of surgical trainees with experienced consultants.

Methods: Prospective data of patients who underwent single-port appendicectomy, in a university-teaching hospital, from 09.2008-07.2011 were included. Operation time was used as a proxy to assess learning. Patients were ordered based on the date of surgery and divided into three groups. Mean operation time of the groups was compared using ANOVA.

Results: 52 patients with a mean age (SD) of 33 (15.8) years were included. The mean overall operating time was 56.6 minutes (SD 17.5). Surgeon A (surgical trainee) performed 28 cases and surgeon B (consultant) performed 24. The mean time (SD) for surgeon A and surgeon B were 63.3 (18.5) and 48.1 (11.7) minutes respectively (p=0.001). A trend in decreasing operating time occurred in the initial phase of learning of Surgeon A but did not reach statistical significance (p=0.08). No such trend was observed for surgeon B (p=0.69).

Conclusion: Single-port appendicectomy can be performed safely by experienced surgeons as well as surgical trainees with experience in open and 3-port laparoscopic appendicectomy. The learning curve for the procedure is short and does not have an impact on patient care.

0819: REQUESTING RADIOLOGICAL INVESTIGATIONS – DO JUNIOR DOCTORS KNOW THEIR PATIENTS?

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Aim: To ascertain clinicians’ knowledge of their patients when requesting radiological investigations, as required legally by government legislation “ionising Radiation (Medical Exposure) Regulations 2000” (IRMER 2000).

Method: All radiological investigation requests received every Monday, excluding plain films, were collected prospectively over 8 weeks. Data included grade of requesting doctor, their specialty, type of modality requested, knowledge of their patient and appropriateness of the investigation. There were no exclusion criteria. Statistical analysis was performed using a two tailed Fisher's exact test.

Results: Of the 164 requests received, the majority (61%) was made by Foundation Programme 1 (FP1) doctors. General medical specialties accounted for the highest proportion of requests (45%). Ultrasound was the most requested imaging modality (47%), followed by Computed Tomography (42%). Almost a third (30%) of the requests were made by doctors who had not seen the patient to be investigated, predominantly by FP1 doctors (p=0.003) and general medical specialties (p=0.001). Overall, 10% of requests were deemed inappropriate.

Conclusion: This study states that almost one third of radiological requests were made by junior doctors who have not seen the patient concerned and were therefore not fulfilling IRMER 2000 criteria. This potentially exposes patients to unnecessary/inappropriate radiation and wastes valuable resources.

0824: BECOMING A FEMALE SURGEON: DO FEMALE SURGICAL ROLE MODELS REALLY MATTER?

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Background: Women represent over half the number of medical students in the UK, despite this, few apply to become surgeons. A lack of female surgical role models has been suggested in the past as an influencing factor.

Aim: To determine which factors deterred UK female junior doctors and medical students from a surgical career and the significance of female surgical role models.

Materials and Methods: An anonymous voluntary paper survey was given out to female final year medical students and Foundation doctors in 2 hospitals in autumn 2010.

Results: Of 46 female final year medical students 30% planned a career in surgery compared to 12% of 50 female Foundation doctors (p<0.05). ‘Work/life balance’ was the main reason cited for rejecting a surgical career. 61% of medical students and 56% of foundation doctors had encountered a female surgical role model. Of those who had not, 50% in each group felt that if they had, it may have persuaded them to consider a surgical career.

Conclusion: ‘Work/life balance’ is still cited by newly qualified female doctors as the main deterrent to a career in surgery. Exposure to female surgical role models may not be as an influencing factor as previously thought.

0835: OSESOPHAGO-GASTRODUODENOSCOPY YIELD IN PATIENTS WITH COELIAC DISEASE PRESENTING WITH IRON DEFIENCY ANAEMIA: A RE-AUDIT

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Objectives: In our previous audit it was shown that the majority of patients with iron-deficiency anaemia (IDA) suspected of having coeliac disease (CD) underwent oesophago-gastroduodenoscopy (OGD) and duodenal biopsy as a routine procedure, but only 0.2% patients had serum coeliac screening prior to OGD. The purpose of this current study was to complete the audit cycle.

Methods: Data related to histology and serum coeliac screen of all patients with IDA undergoing OGD in a District General Hospital from January 1st to October 31st 2011 were evaluated.

Results: A total of 732 patients with IDA were referred for OGD. There were 282 male patients with a mean age of 69.1 years. Duodenal biopsy was performed in 610 patients (83.3 %); CD was confirmed in 17 patients (2.8%). Duodenal biopsy was normal in 593 patients (97.2 %). A total of 122 patients (16.7 %) had serum coeliac screening prior to OGD; 7 cases (5.7%) were positive.

Conclusion: Completing the audit cycle it was found that, although there was an improvement with more patients undergoing coeliac screen before OGD but the majority (83.3 % ) of patients with suspected CD presenting with IDA continue to undergo OGD and duodenal biopsy as a routine procedure.

0860: TRAINING OPPORTUNITIES IN EMERGENCY GENERAL SURGERY

Mersey Emergency Surgery Audit (MEnSA) Study GroupMersey Research Group for Surgery (MeRGS), Merseyside, UK

Aim: Recent guidance from the Royal College of Surgeons suggested high-risk emergency surgical cases should be supervised by a consultant surgeon. We sought to assess impact on emergency surgical training.

Method: In 8 acute trusts, all emergency general surgery operations were identified during a 30-day period in 2011. Operative details were recorded. Risk prediction was calculated using POSSUM (predicted mortality >10% high-risk). Data was analysed centrally.

Results: 494 procedures were performed on 471 patients. Overall mortality was 5%(24 patients). A consultant was present during 164(33.2%) of operations, being the primary operator in 116(23.5%) and supervising the trainee in 48(9.7%). Trainees performed the procedure unsupervised in 313(63.4%) cases. 65(13%) cases were deemed high-risk. A consultant was present in 46(70.1%) of these cases, supervising a trainee in 7(10.8%). 15(23%) high-risk cases were performed solely by trainees.

Conclusion: To comply with the guidance only 19%(4%) of all emergency surgical cases require additional consultant input. These cases offer invaluable learning opportunities for trainees, however only 7(10.8%) of patients deemed high-risk were operated on by trainees under consultant supervision. The focus should be on consultant supervision rather than consultant-led operating to maximize experience.

0866: THE WEBSITES OF THE SPECIALTY COLLEGES: ENLIGHTENING OR EXASPERATING?

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Introduction: The move towards online learning, portfolios, research and guidelines draws clinicians to the college websites.

Aims: To critically evaluate the websites of eighteen medical speciality colleges in the United Kingdom and Ireland with an objective scoring system.

Methods: We adapted a system for evaluating web-based information (E. Kirk, John Hopkins University) to evaluate college websites. The adapted criteria were defined as: authorship, transparency, core resources, currency, design and usability. Using objective questions to test the criteria, we produced a scoring system which was applied to each website.
Results: The websites were scored and the three highest rated are as follows: in third place The Royal College of General Practitioners, in joint second were the Royal College of Physicians (London) and Royal College of Surgeons in Ireland and in first place with the highest rating, the Royal College of Surgeons of England.

Conclusions: These websites are key in the way the colleges interact with both medical professionals and the public. Our subjective opinion that the websites varied in their effectiveness as a resource, correlated with variability in the scoring. We found that many of the college websites have the potential to deliver more for their users.

0884: HOW CAN WE ENHANCE UNDERGRADUATE MEDICAL TRAINING IN THE OPERATING THEATRE? A SURVEY OF STUDENT ATTITUDES AND OPINIONS
S.J. Chapman, A.R. Hakeem, G. Marangoni, K.R. Prasad. St. James’s University Hospital, Leeds, UK

Aims: Attending theatre may add substantial value to undergraduate medical education. At present, student participation is left largely to individual initiative. We assessed student attitudes towards theatre participation to see how the experience could be improved.

Methods: All students from Leeds School of Medicine were invited to complete an online-based questionnaire. Responses relating to previous experiences, desired improvements, acquired benefits, impact on career aspirations and attendance were gathered. Students rated their overall satisfaction on a 10-point scale.

Results: 287 students (20%) responded to the survey. 88% had previous theatre experience. The median overall satisfaction was 7/10. Desired improvements included: more opportunity to assist the surgeon (75%); more structured teaching (71%); feedback on performance (54%); and better induction to the theatre environment (57%). The described benefits of attending theatre were improvements in: scrub technique (82%); knowledge of anatomy (72%); anaesthesia (67%) and surgical procedures (86%). There were heterogeneous answers regarding the role of theatre in encouraging a surgical career. The totality of students who had never attended theatre would do so if given the opportunity.

Conclusions: Many benefits can be derived from attending theatre but these may be offset by other factors. The experience may be of increased value to medical education if a better structured teaching programme is developed.

0893: ANATOMY IN UNDERGRADUATE MEDICAL EDUCATION: A SURVEY OF STUDENT PERCEPTIONS
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Aims: A shift away from cadaveric dissection in UK medical curricula has emerged. The impacts of this on future anatomical and surgical competences are unclear. We assessed student perceptions to different methods of anatomy teaching.

Methods: All 2nd-year students from Leeds School of Medicine were invited to complete a questionnaire. Participants rated six teaching methods (dissection; prosection; lectures; demonstration models; computer software packages; living anatomy & medical imaging) on a 5-point scale against pre-determined learning objectives. Categorical variables are expressed as mean+/-SD versus: [all other variables]. An unpaired t-test was performed (p<0.05 considered statistically significant).

Results: 170 students (68%) responded to the survey. Cadaveric dissection and prosection were preferred to instil anatomical knowledge (4.6+/0.7 and 4.6+/0.7 versus [3.7+/0.8]; p<0.0001). Dissection was also preferred to: provide a 3-D appreciation of the body (4.9+/0.5 versus [3.6+/1.0]; p<0.0001), appreciate anatomical variation (4.7+/0.7 versus [3.1+/1.1]; p<0.0001) and encourage self-directed learning (3.9+/1.1 versus [3.2+/1.2]; p<0.01). Lectures were preferred to provide a background for basic sciences (4.0+/0.9 versus [3.1+/1.1]; p<0.0001) and to relate structure to pathology (4.0+/1.0 versus [3.3+/1.1]; p<0.01). Clinical anatomy was best appreciated through living anatomy & medical imaging (4.1+/1.1 versus [3.7+/1.1]; p<0.001).

Conclusions: Cadaveric dissection is a favourable approach for achieving important learning objectives in Anatomy. Further evaluation of teaching methods is required before further changes are made to undergraduate medical curricula.

0898: ROLE MODELS AND MENTORSHIP IN SURGERY IN THE CURRENT ERA
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Aim: The aim of this study was to evaluate the prevalence of role models and mentors among medical students and surgical trainees and to determine how the process of mentoring works.

Method: A 35-point online questionnaire was distributed to medical students at NUI Galway and members of ASIT, including questions regarding mentorship and role models and questions relating to the mentorship process.

Results: A total of 162 medical students and 216 surgical trainees completed the questionnaire. 80% (n=124) of medical students did not have a mentor but 51.7% (n=104) of trainees claim to having a surgical mentor. 64% (n=88) of students but only 37.6% (n=61) of trainees would like to be involved in a formal mentoring programme. Only a third of students had identified a role model in medicine, while over half had identified a negative role model. 70% (n=151) of surgical trainees had identified a role model and 77% (n=112) had identified a negative role model in surgery. Important role model and mentor traits were identified by each group.

Conclusions: There is a low prevalence of role models and mentors within surgery and this study illustrates the need to promote mentorship of medical students and trainees.

0934: MICROSURGICAL SKILLS STATION – A PRACTICAL WARD-BASED MODEL TO IMPROVE PLASTIC SURGICAL SKILLS
Richard Chalmers. The James Cook University Hospital, Middlesbrough, UK

Introduction: Various microsurgical training techniques have been published including anastomosis training on cadavers, chicken wing arteries and live porcine or rat models. Whilst in vivo vessels to practice on are ideal, the availability, cost and practicalities of these techniques are limiting. cheaper and more accessible training formats are required to allow trainees to gain invaluable skills outside of the operating room.

Microsurgical skills station: I have designed and built 2 workstations which aim to increase the practical knowledge and physical dexterity of trainees in microsurgical techniques. The first uses a surgical glove construct to practice various end-end and end-side anastomosis techniques. The second comprises completing a sewing needle “Salom Course” through which the trainee is timed using microsurgical instruments and a 9/0 suture under the microscope. Improved course times are taken as an improvement in practical skills. The cost of the skills station is under £10 and has proven to be of great educational value to our trainees.

Conclusion: Surgical training is evolving. Trainees need to be at the centre of this change to influence and enhance training opportunities and experience. This simulation/workstation is a cheap, reproducible and simple way of improving surgical skills and dexterity outside of the operating room.

0950: PEER TO PEER CROSS-COVER SHO TEACHING, AN UNDERUTILISED AND USEFUL EDUCATIONAL TOOL
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Aim: To measure the effectiveness of peer to peer SHO teaching in improving the confidence and knowledge of cross-cover trainees out of hours.

Method: A prospective three month study following six cross-cover MaxFax SHOs (dentally trained and cross covering ENT) was undertaken. Confidence levels in dealing with a medical emergency (ECG changes in ST elevation MI) and an ENT emergency (acute paediatric epiglottitis) were measured via a secure online questionnaire. A senior ENT SHO was selected to provide teaching on the above topics, then confidence levels were reassessed.

Results: The response rate to both online questionnaires was 100%. Before the teaching sessions, 100% did not feel confident in identifying ST elevation on ECGs and 83.3% were not confident in the initial management of acute paediatric epiglottitis. All respondents agreed that peer to peer teaching led to an improvement in confidence levels.
