1447: DOES 3D IMAGING IMPROVE LAPAROSCOPIC INTRACORPOREAL SUTURING SKILL ACQUISITION IN NOVICES AND TRAINEE SURGEONS? 
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Aims: To objectively evaluate and compare the effects of 3D versus 2D vision on novice and surgeons performing laparoscopic intracorporeal suturing in terms of performance times, number of repetitions and errors in standardised laboratory settings.
Methods: Thirty novices (medical-students) and twenty four core surgical trainees (year 1 & 2) were randomised between two vision systems (3D or 2D) stratified by gender. Candidates performed laparoscopic intracorporeal suturing according to the validated fundamentals of laparoscopic surgery (FLS) curriculum until task proficiency is achieved. Parameter measured were the total time to reach task proficiency, number of repetitions and task errors.
Results: We concluded that the performance time and repetitions while performing laparoscopic suturing under 3D and 2D vision systems were similar, but a trend towards fewer errors and better precision score was observed in 3D vision in both novices and trainees. The novice participant’s error score was statically significant (P=0.002).
Conclusion: Acquiring laparoscopic suturing skills using 3D vision system is as effective as conventional 2D laparoscopy with no statistical difference in time, number of repetitions and measured error rates in reaching proficiency using FLS curriculum. However, there is a trend towards fewer errors and better precision score in candidates performing under 3D vision.

1449: IMPACT OF EWTD ON PATIENT CARE AND TRAINING – EXPERIENCE OF A DISTRICT GENERAL HOSPITAL
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Objectives: The European Working Time Directive (EWTD) 48 hour working week has been implemented in the UK since 2009. A key component is that the maximum period of work for a resident doctor without rest is 13 hours. We designed a new working model compatible with EWTD.
Method: Since 2009, a hybrid “ward-based” system has replaced the traditional team-based system. Ward rounds are conducted by “Senior Decision-Maker” (Registrar/Consultant) assisted by junior doctors. The consultant on-call rota includes day and night cover, with regular consultant covering daily ward rounds. Weekend plans are made and patients for senior review flagged. New doctors were introduced to the system via robust induction.
Results: This model allows compliance with EWTD, a different working environment and opportunities for WBAs. Daily senior input facilitated early discharge of patients. Drawbacks were reduced staff availability for elective work, rota difficulties and lack of patient-ownership. Consultants are not available for elective work for two weeks of the rota cycle.
Conclusion: EWTD is here to stay. The key is to mitigate the known adverse effects of reduced working hours. Increasing consultant involvement in daily ward management may deny trainees of learning opportunities. Evaluation of trainee satisfaction and patient safety with this model is in process.

1470: HOLOGRAPHY IN CLINICAL ANATOMY EDUCATION: A SYSTEMATIC REVIEW
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Abstract: The visualization of anatomical concepts is an integral part of both medical education and clinical practice. One of the most recent discoveries not used in gross anatomy instruction is a three-dimensional (3D) holographic video projection. A literature review was performed in order to look at the current and potential future uses of this technology within the realm of education and clinical practice.
Objective: To systematically review the role of holography in undergraduate and postgraduate anatomy education according to international literature.
Material and Methodology: Systematic review was performed on pubmed / MEDLINE scientific search engine. Key words included hologra*, AND anatom* (36) and Hologra* AND clin* (7). A total of 43 publications were identified in the English language as being applicable to our review.
Results: Our literature review showed that holographic technology was currently being used for clinical and educational application. Clinically, cardiac valve pathology was being identified with the use of 3D hologram echocardiographic images. Educationally, this technology was being used to aid the understanding human neuroanatomy.
Conclusion: This paper introduced the hypothesis of a novel teaching modality using 3D holographic technology in gross anatomy instruction, with a significant potential within clinical and medical education settings.

1475: THE 21ST CENTURY STETHOSCOPE — ANNUAL ACTIVITY FOR SURGEON-PERFORMED ULTRASOUND
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Background: Point-of-care ultrasound is revolutionising care in emergency medicine. This study presents the experience of a single consultant general surgeon with a vascular and endocrine interest performing point-of-care ultrasound.
Methods: All patients undergoing point-of-care ultrasound by a single consultant surgeon between January and December 2012. Patients underwent scanning in the setting of a vascular, endocrine, or general surgical clinic as well as the general surgical take, if they presented with an intra-abdominal problem.
Findings: From 1929 patient clinic visits, 1603 were new episodes, and 420 were general surgical admissions. Point-of-care ultrasound was undertaken in 425 cases and vascular duplex examination in 330 cases. Thyroid and parathyroid evaluation was the most common indication for clinic point-of-care ultrasound (255 cases). Onward referral for departmental ultrasound was undertaken in 150 endocrine patients, but not for any vascular patients. On the general surgical take, 84 scans were undertaken, mostly for investigation of right upper quadrant pathology. Twenty of these patients were referred on for departmental ultrasound.
Conclusions: Surgeon-performed point-of-care ultrasound can be a high volume activity in motivated individual consultant surgeons. Adoption of this technique as an adjunct by the UK surgical community could reduce departmental ultrasound costs, time and accelerate processes of care.

TRANSPLANT SURGERY

0581: PARENTS EXPERIENCE LESS PAIN THAN OTHER LIVE KIDNEY DONORS
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Aim: Post-operative pain levels depend on many variables, and post-transplantation these may include donor-recipient relationship. This study investigates whether parents donating kidneys to their children experience less pain, as measured by analgesia use, than other kidney donors.
Methods: Data was collected from all live donor kidney transplants carried out in Addenbrookes Hospital in 2012. Data recorded included operation date, donor age and gender, length of stay, PCA use, use of other analgesia, post-operative complications and recipient relationship, age and gender.
Results: Data was collected on 38 transplants. One donor was excluded (required laparotomy 3 days post-nephrectomy). Parents (n=7) used significantly less PCA than non-parents (n=30) (p<0.05) and were the group who used the least PCA out of parents, siblings, spouses/partners and others. They also used less of other analgesics than non-parents. Females (n=19) used significantly less than males (n=18) (p<0.05), but even within the female group, parents (n=5) used less than non-parents (n=13) (p<0.01). Age was not related to PCA use.
Conclusion: This study supports the hypothesis that parents experience less pain than non-parent donors. Pain is thought to have a major psychological element, and this demonstrates that in kidney donors this is an important contributor.

0876: LIVER TRANSPLANTATION FROM DONATION AFTER CIRCULATORY DEATH DONORS IN PATIENTS WITH HEPATOCELULAR CARCINOMA: RESULTS IN GOOD OUTCOMES
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