

**Conclusion:** Urology is the least popular surgical career to pursue. Increased exposure to urology for undergraduates and dedicated workshops are needed to address these challenges.

#### 0707: CAN GOOGLE GLASS BE USED AS A TRAINING AND ASSEMENT TOOL?

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**Aim:** Limitations to working hours causes concerns for surgical training. Our pilot survey from 30 surgical trainees demonstrated problems regarding operating time and the quality of intra-operative feedback. We believed there was a requirement for a better training tool.

**Methods:** Google Glass for training and research was approved by the Trust Ethics Board and tailored consent forms were created. A small database of ENT and Orthopaedic surgical recordings were stored to a secure educational drive and a second set of recordings were done whilst a trainee operated and the trainer sat in the adjacent room, watching the procedure on a visual handpiece.

**Results:** In a second survey of the pilot group, 100% stated they would like access to the operative database, in particular of the lesser performed surgeries and 87% would welcome Google Glass as a surgical training tool. Feedback from trainers described increased confidence in leaving the trainee to operate.

**Conclusion:** There is clear role of Google Glass in surgery, it can be used to provide a database of teaching surgeries, a tool for assessment and reflection and evidence for Annual Review of Competence and Interviews. The interactive element provides reassurance to both trainer and trainee.

#### 0709: THE MERTHYR COACHING TOOL FOR LAPAROSCOPIC COLORECTAL SURGERY (LCS)

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**Aim:** LCS is being offered increasingly offered to patients within the UK. Although national training programmes are being developed in some areas, many surgeons continue to be trained thorough alternative mechanisms. We present a coaching tool developed within an established laparoscopic colorectal unit that has been used effectively to provide targeted training in LCS.

**Methods:** To support training in our unit a simple assessment tool was developed and used effectively to coach trainees since 2011. Factors used to in assessment include case selection, access/exposure, port positioning, small bowel stacking, retraction, identification/protection of vital structures, safe vascular pedicle dissection and bowel mobilisation, and team working behaviour. We present our initial experience from the use of this tool.

**Results:** This tool has been used initially in self-assessment by the two authors over 225 cases. Subsequently, it has been used with 8 trainees of varying levels of experience and 11 consultant colorectal surgeons over a total of 66 cases to assess the performance as well as provide targeted feedback.

**Conclusion:** The tool has been shown to be a useful adjunct to the teaching and development of LCS within our centre. Further validation and on-going assessment is required to promote its continued uptake.

#### 0717: MAINTENANCE IV FLUID PRESCRIBING REFLECTS POOR JUNIOR DOCTOR KNOWLEDGE OF IV FLUIDS AND NEW NICE GUIDELINES FOR IV FLUID PRESCRIBING: IMPROVING IV FLUID PRESCRIBING IS DIFFICULT

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**Aim:** NICE guidelines (Dec 2013) recommend maintenance fluids providing 25-30ml/kg/day water, 1mmol/kg/day Na/K/Cl, and 50-100g/day glucose; representing a marked change from the traditional "one salt two sweet" regimen.

We aimed to assess junior doctors' knowledge of these guidelines, audit adherence, and improve prescribing practices.

**Methods:** Questionnaire and three 1-week prospective audit cycles following two interventions (1st – junior doctor teaching, 2nd – teaching & IV fluid prescription tool).

**Results:** 45/55/73/73/55% knew NICE's recommendation for water/Na/K/Cl/glucose provision respectively.

18/18/9/45% knew electrolyte compositions of Hartmann's/0.9% saline/0.45% saline + 5% dextrose/5% dextrose respectively.

In total 43 patients received a total of 75 days of fluid. More than 50% of bags prescribed were Hartmann's. Fluid prescriptions showed a shift towards the recommended allowances, improving from 29.1 to 24.5ml/kg water; 3.6 to 2.6mmol/kg sodium; 0.15 to 0.3 mmol/kg potassium; 3.2 to 2.5 mmol/kg chloride and 2.9 to 18 g glucose.

**Conclusion:** Junior doctors have a poor awareness of both the NICE guidelines and electrolyte content of commonly prescribed fluids.

Over-reliance on Hartmann's solution as the maintenance fluid of choice results in over-prescription of sodium and chloride and under-prescription of potassium and glucose.

Prescribing practices can be improved, but multiple modalities and repetition of teaching are necessary to update prescribers to the latest guidelines.

#### 0723: FACE AND CONTENT VALIDATION OF CADAVERIC SIMULATION IN COLONOSCOPIC TRAINING (PRELIMINARY RESULTS)

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**Aim:** To demonstrate face and content validity of cadaveric simulation as a tool for training in colonoscopy.

**Methods:** 5-point Likert-type scale questionnaire is used by candidates attending an endoscopic course involving one station of cadaveric simulation for training basic skills of colonoscopy to assess face and content validity.

**Results:** 10 trainees attended an endoscopy course at the Simulation Centre (ST-2-ST6, surgeons/gastroenterologists). For face validity, overall average score was 3.83. Tissue behaviour score was 3.81 with highest score (> 4) achieved in mucosal visualization, anatomical landmarks and reality of pathology. The lowest score was (3.4) regarding tissue pliability. Overall score for reality of manoeuvre was 3.9. Highest score was for tactile feedback (4.4) and torquing (4) while the lowest score (3.5) were for scope navigation. Overall score for Content validity was 3.5. Highest score was achieved for overall comfort and realism. Usefulness for basic and advanced training was 3.4.

**Conclusion:** The preliminary results of cadaveric simulation show face and content validation is achievable. Advantages of cadaveric simulation include tissues and pathology realism and tactile feedback. Challenges may include the tissue pliability and reality of deformation. Future research will include larger number of candidates aiming at achieving higher study power and construct validation.

#### 0729: SURGICAL PATHOLOGY OF THE GORDON MUSEUM

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**Aim:** The study of gross operative specimens is a valuable, yet under-utilised, methodology to learn about surgical disease. The Gordon Museum (London, UK) houses over 8,000 specimens, making it the largest pathology teaching collection in the country. The aim of this study is to demonstrate the value and relevance of studying gross pathological specimens, such as those in unique educational collections like at the Gordon Museum.

**Methods:** Six specimens were selected from the Gordon Museum based on their relevance to the museum's history and to the educational requirement of the modern surgical trainee (as judged by their inclusion in the Membership of the Royal College of Surgeons exam syllabus). High-resolution photographs were taken of each, and relevant case histories reviewed. Additionally, a literature review concerning the diagnosis, assessment and management of each pathology was performed.

**Results:** High-resolution photography of six gross pathological specimens from the Gordon Museum are presented alongside case histories and a