Results: All patients have a viable flap and ambulate with below-knee prosthesis. A number of cases report sensation over the stump and have good range of movement at the knee joint. Five cases were complicated with minor flap infections but all were successfully treated with antibiotics and excision.
Conclusions: The benefits of the VLPTA flap are numerous. Firstly, the glabrous skin of the sole is specifically designed for weight-bearing and resisting shearing forces incurred upon ambulation. The pedicled flap addresses complications associated with anastomosis of free flaps and also provides sensation to the stump. Furthermore, the flap can provide sufficient coverage to enable conservation of length.

1169: BITES: A SURGICAL EMERGENCY?

Fergal Marlborough, Patrick Addison, Emma Murray. *St John's Hospital, Livingston, UK*

Background/Introduction: Current protocol assumes bite injuries are infected at presentation and should be treated with emergency debridement. In busy units many fail to reach theatre within 24 hours of injury.
Aims/Objectives: To compare outcomes in patients that did not reach theatre within 24 hours with those who did, and therefore determine if bites could be managed non-urgently.
Method: We audited patients admitted to the plastics unit with bites over 12 months, looking at time to theatre, number of operations, and antibiotic therapy.
Results: Of 56 patients, 6 avoided theatre, as wounds improved with antibiotics. 23 reached theatre within 24 hours (early), 15 between 24-48 hours (delayed) and 12 went 48 hours post bite (late). Mean number of operations for the early group was 1.13 versus 1.20 for the delayed group, which was insignificant. "Bad outcomes", defined as persistent infection after initial debridement, occurred in 4/23 patients in the early, 0/15 in the delayed and 4/12 in the late group.
Discussion: In systemically well patients without structural damage antibiotics may allow surgery to be delayed. Clinical improvement with antibiotics may negate the necessity for surgery. In late presenters, who have clinical evidence of infection urgent surgical washout should be considered.

1196: ULTRASOUND SCANNING IN THE ASSESSMENT OF POST OPERATIVE FLEXOR TENDON REPAIRS

Fergal Marlborough, Jim Armstrong, Marcus Bisson. *Hutt Hostpial, Wellington, New Zealand*

Introduction: Ultrasound diagnosis of flexor tendon rupture post repair is an area that has not been researched widely. A cheap imaging modality, ultrasound could assist with follow up.
Objectives: To discover if ultrasound was useful in follow-up of flexor tendon repairs, specifically diagnosis of post-operative tendon rupture.
Method: Over four weeks, patients having undergone flexor tendon repair were imaged. 2 operators, FM (junior doctor) and JA (plastic surgeon) visualised the scans. Data was recorded on injury method, range of movement (ROM), volar-dorsal tendon thickness at repair site and at the corresponding undamaged tendon at the on the contralateral hand.
Results: 16 patients were involved, with 19 repaired tendons scanned. Mean thickness was 4.2mm in repaired tendons versus 3.6mm in healthy counterparts. This was insignificant. In 2 patients with less ROM than expected at their stage post-repair, ultrasound confirmed sliding motion of the tendon, aiding to exclude rupture.
Discussion: Ultrasound may have a role in assessing tendon repairs, particularly in patients who neither have clinical evidence of total tendon division nor full range of flexion. As a real-time modality it could be used in outpatient settings. Limitations include operator dependency and wound pain from pressure applied by ultrasound probes.

SURGICAL TRAINING AND EDUCATION

0041: MENTOR-MENTEE RELATIONSHIPS IN THE CHANGING WORLD OF MEDICAL AND SURGICAL TRAINING: DO MENTORS STILL KNOW WHO IS WHO?

Shofiq Islam, Jennifer Cole, Alexandra Lee, Christopher Taylor, Brian Isgar. *Dept of General Surgery, The Royal Wolverhampton Hospital, Wolverhampton, West Midlands, UK*

Aim: To determine the views and understanding of new titles used to describe junior doctors in training amongst a group of hospital consultants; following the implementation of Modernising Medical Careers in the UK.
Methods: A questionnaire survey of 75 consultants working in a district general hospital in the West Midlands UK, eliciting information about views and knowledge of current nomenclature. Consultants were asked to match equivalent positions with those based on the traditional system.
Results: Our survey revealed some lack of understanding of the new nomenclature. Replies were received from 52 consultants. Only 56%(n=29) of consultants felt they fully understood the terms. The most common title correctly matched was FY1 with House Officer (100%, n=52). 88%(n=46) matched ST3 with Junior Registrar, similarly 82%(n=43) matched ST7 with Senior Registrar. Only 50%(n=26) correctly matched 'Specialty Doctor' with Staff Grade/Associate Specialist. Under half surveyed correctly matched ST1 and GP-VTS with the correct equivalent. Only one stellar individual recorded a perfect matching score. There was no statistically significant difference between consultant surgeons and physicians. We did not find a statistically significant difference in the number of correctly matched responses with respondents' age, gender or experience.
Conclusion: The result of our survey suggested potential disruption to the mentor and mentee relationship.

0054: THE GRADUATING MEDICAL COHORT: FUTURE SURGEONS DEMONSTRATE A DIFFERENT SET OF CAREER INFLUENCES

Daniel Stevens [1], John Mason [1], John Jackson [1], Rebecca Woolf [1], Justice Kynoch [2], Emily Hotton [3]. [1] *Cardiff University, Cardiff, UK;* [2] *Glasgow University, Glasgow, UK;* [3] *University of Bristol, Bristol, UK*

Aim: To identify influencing factors for graduating doctors considering a career in surgery.
Methods: A pre-existing questionnaire was distributed using SurveyMonkey® to all graduating doctors at Cardiff, Bristol and Glasgow Schools of Medicine. Respondents provided demographic information, their ideal career choice and the specialty that realistically they saw themselves working in. Following this, respondents rated 19 career influences using a 5-point Likert scale. Data were analysed using independent t-tests.
Results: 232/734(32%) responded. 42 ideally wanted a surgical career compared with 190 who didn't. Those who wanted a surgical career were less influenced by patient relationships ($p<0.001$), working hours($p<0.001$), stress($p=0.007$), lifestyle($p=0.001$) and training length($p=0.03$) when compared to those not wanting a surgical career. They were more influenced by financial potential($p=0.015$) and prestige from the public($p=0.01$). Only 25(59%) of those who wanted a surgical career felt they would realistically achieve it. Those who were not confident of achieving this goal were significantly more influenced by job security($p=0.014$), lifestyle($p=0.025$), competitiveness($p=0.003$), and their financial situation($p=0.03$).
Conclusions: There are clear differences in influencing factors between potential surgeons and the rest of the graduating medical cohort. Those confident of achieving a surgical career demonstrate a set of influences that differ from those who are not.

0108: HOW COMPETENT ARE SCOTTISH SURGICAL TRAINEES IN CENTRAL VENOUS CATHETER INSERTION?

Eugene Tang, Marion Mackinnon, Stephen McNally. *Royal Infirmary of Edinburgh, Edinburgh, UK*

Aim: Central venous catheter (CVC) insertion is a key skill required by trainees in acute specialties and one of the core competencies of ISCP. Recent changes in training/reduced working hours may have impaired training. This study determines the changes in CVC experience in Scottish surgical registrars compared to other acute specialty registrars between 2006 and 2011.
Methods: An online questionnaire was designed using web-based software. Invitations were sent to registrars (SpRs/ST3+) in General Surgery, Anaesthetics and Medicine throughout Scotland in 2006 and 2011.
Results: 233 registrars replied in 2011 and 175 from 2006. 97.9% of current trainees could insert CVCs. Only 26.4% of surgeons had inserted over 50 lines with anaesthetists (71.8%) placing the greatest number ($p<0.0001$) (physicians 45.2%) and a reduction of total numbers over the 5 year period. Anaesthetists also inserted more CVCs per annum. In 2011 more trainees in

each specialty used ultrasound guidance, most using it in real-time ($p<0.0001$).
Conclusions: Fewer 2011 trainees had inserted over 50 CVCs, a number associated with reduced complications. Low annual and total numbers of CVC insertion by non-anaesthetists may expose patients to greater risks, despite the use of ultrasound guidance. If CVC insertion is to remain a key skill in surgical training, changes in training structure are required.

0109: EARLY GOAL DIRECTED THERAPY: WHO SHOULD PROVIDE IT?

Eugene Tang, Marion Mackinnon, Stephen McNally. *Royal Infirmary of Edinburgh, Edinburgh, UK*

Aim: Early Goal Directed Therapy (EGDT) is a key component in managing sepsis and a cornerstone of the Surviving Sepsis Campaign (SSC). Previously we demonstrated that non-anaesthetic registrars lack the knowledge/skills to provide EGDT. This five year follow-up determines whether current trainees have had greater training in this area.
Methods: A questionnaire was designed for online access. Invitations were sent to registrars (SpRs/ST3+) in Anaesthetics, General Surgery and Medicine throughout Scotland in 2006 and 2011.
Results: In 2011, 233 registrars replied with 175 responses in 2006. There had been an increase in the awareness of EGDT over the 5 year period (physicians 51.3% vs. 87.5%, surgeons 70.2% vs. 88.5%). 62% of surgeons and 59% of physicians possessed the minimum skill set to commence EGDT. However, the number of non-anaesthetists able to provide EGDT remains low (physicians 32%, surgeons 9%). This contrasts with anaesthetists where 76% could provide EGDT.
Conclusions: There is now a greater awareness of EGDT/SSC in non-anaesthetic trainees. Although over half of non-anaesthetists possessed skills to initiate EGDT, few are able to provide EGDT in its entirety. As non-anaesthetists lack the full complement of skills/knowledge to implement EGDT, these patients require referral to anaesthetic colleagues for optimal management.

0186: INDEXED PUBLICATION PRACTICES OF CONSULTANT PLASTIC SURGEONS IN THE UK

Nigel Mabvuure [1], Michelle Griffin [2], Sandip Hindocha [3]. [1] *Brighton and Sussex Medical School, Brighton, UK;* [2] *Manchester Interdisciplinary Biocentre, University of Manchester, Manchester, UK;* [3] *Whiston Hospital, Liverpool, UK*

Aim: To characterise the publication practices of consultant surgeons, who are full members of the British Association of Plastic, Reconstructive and Aesthetic Surgeons (BAPRAS), over a 2-year period.
Method: Surgeons were identified from *www.bapras.org.uk/page.asp?id=34*; gender and highest academic degrees were recorded. PubMed was searched for each surgeon between 2009/11/29 and 2011/11/28 e.g. Joe Alfred Burns FRCS(Plast)'s search would be:"Burns,Joe+A OR Burns+Joe+A", "Burns,JA AND Burns+JA" and "Burns,J AND Burns+J" or "Burns" if no results returned. The article type, whether clinical or scientific and the surgeon's author rank were recorded. All searches were repeated on 3 occasions.
Results: Out of 741 articles, 46.4% were research and outcome analysis articles; 26.2% case reports/series; 19.6% letters/comment/technique articles; 6.9% reviews; 0.7% audits and 0.3% editorials. The ratio of clinical to science studies was 15:1. Consultant surgeons were first author on 6.2% of publications and last author on 62.2%. Males and females published equally(P=0.859).Surgeons with higher academic degrees had a higher number of indexed peer-reviewed publications(P=0.001).
Conclusions: Outcome analyses, case reviews and letters on technique or commentaries remain popular methods of communicating and disseminating knowledge. There appears to be a greater requirement for basic science research within plastic surgery in the UK. In addition more published audits may provide improved healthcare economics and standards in practice.

0234: A SYSTEMATIC REVIEW OF MOTION ANALYSIS AS A VALID TOOL FOR LAPAROSCOPIC SKILL ASSESSMENT IN GENERAL SURGERY

John Mason, James Ansell, Neil Warren, Jared Torkington. *Welsh Institute of Minimal Access Therapy (WIMAT), Cardiff, UK*

Aims: To provide an overview of the different motion analysis technologies available for the assessment of laparoscopic skill, and to assess the evidence for their validity.
Methods: A systematic review was performed using Embase, MEDLINE and PubMed for studies investigating motion analysis as a valid tool for laparoscopic skills assessment. Studies were assessed according to a modified form of the *Oxford Centre for Evidence Based Medicine* levels of evidence and recommendation.
Results: Thirteen studies were included. Twelve (92.3%) evaluated construct validity, which was demonstrated for various endpoints across a range of laparoscopic tasks for the Advanced Dundee Endoscopic Psychomotor Tester (ADEPT), the Hiroshima University Endoscopic Surgical Assessment Device (HUESAD), the Imperial College Surgical Assessment Device (ICSAD), the ProMIS Augmented Reality Simulator and the Robotic and Video Motion Analysis Software (ROVIMAS). Face validity was reported by 1 study each for ADEPT and ICSAD. Concurrent validity was reported by 1 study each for ADEPT, ICSAD and ProMIS. There were no studies investigating predictive validity.
Conclusions: This study confirms the construct validity of motion analysis in laparoscopic skills assessment. The most useful metrics appear to be time, path length and number of hand movements. Future work should concentrate on predictive validity.

0241: COMPARING THE ATTITUDES TOWARD AND KNOWLEDGE OF INCIDENT REPORTING BETWEEN JUNIOR DOCTORS AND NURSES IN A DISTRICT GENERAL HOSPITAL

Jessamy Bagenal [1], Kapil Sahnan [1], Saran Shantikumar [2]. [1] *Severn Surgical Deanery, Bristol, UK;* [2] *Bristol Heart Institute, Bristsol, UK*

Aim: Open reporting improves a system's ability to deal with risky processes. We compared the attitudes and knowledge of incident reporting between junior doctors and nurses in a district general hospital.
Methods: A questionnaire examined healthcare workers' attitudes towards reporting and errors. It also assessed knowledge of incident reporting and attitudes towards training in patient safety. Nurses (band 5-7, n=50) and junior doctors (FY1-CT2, n=50) completed the survey online and anonymously.
Results: Whilst similar proportions of each group knew a safety organisation (70% nurses *vs.* 58% doctors, $p=0.21$), significantly more nurses had filled out an incident report (96% nurses *vs.* 52% doctors, $p<0.001$). Doctors felt they did not have sufficient training in patient safety (66% doctors *vs.* 24% nurses, $p<0.001$) and fewer felt confident with patient safety issues (38% *vs.* 72%, $p<0.001$) The majority of respondents agreed that incident reporting was beneficial (69%, $p=0.001$) although a large proportion also felt they would be blamed for errors (61%, $p=0.03$).
Conclusions: Junior doctors need more training in patient safety issues and reporting. Nurses generally have a more positive and confident view towards patient safety issues. Healthcare institutions should focus on training their staff in patient safety and fostering a blame-free culture.

0301: IMPROVING THE QUALITY OF OPERATION NOTES IN AN ORTHOPAEDIC ONCOLOGY DEPARTMENT THROUGH EDUCATION AND IMPLEMENTATION OF A MNEMONIC DEVICE

Robert Grimer, Natasha Bauer, Anna Wilson. *University of Birmingham, Birmingham, UK*

Aim: To ascertain the quality of operation notes of patients undergoing a surgical procedure in the department of Orthopaedic Oncology.
Method: A retrospective audit involving 100 operation notes, competed by 6 consultants and 12 trainees, of patients undergoing elective procedures from January 2011 to December 2011. The quality of documentation was determined by the adherence to the guidelines published by the Royal College of Surgeons of England (Good Surgical Practice, 2008). Our findings were presented, highlighting areas requiring improvement. In addition to educating surgeons, we implemented a mnemonic device and have conducted a re-audit.
Results: A quarter (25%) of all operation notes were considered illegible with instructions about DVT and antibiotic prophylaxis missing in 67% and 37%. The indication and post-operative management was absent in 13% and 3% of notes, respectively. The re-audit showed a significant improvement in several areas of documentation.
Conclusions: Clear and accurate documentation can inherently improve the subsequent quality and effectiveness of patient care. One way of doing so is by introducing a mnemonic device to ensure that important information is not routinely missed out.