Surgical Forum

Friday 28 June 2013

Wessex Deanery
Southern House
Otterbourne

0910: Introduction and Welcome: Sarah Stapley - Programme Director

All presentations will be 7 minutes long with 3 minutes for questions
Please keep strictly to timings. Presenters will be interrupted if their presentation overruns.

Session 1: Theme – General Surgery

Chair- Ms Sonia Wakelin

0915: Theo Delisle – Laparoscopic APERs are associated with early postoperative recovery
0925: William Maclean – 10 Years of Laparoscopic Cholecystectomy – Changes in Practice and Attitudes
0935: P Chaichanavichkij – Post-operative complications following emergency appendicectomy
0945: Jon Griffin – Diabetic Foot Infections: A Quality Improvement Project
0955: Michael Glayser – A double blinded study to investigate the role of plasma Procalcitonin levels as an adjunct marker in clinically suspected appendicitis
1005: Rahul Bhome – The Use of Chaperones on the Surgical Take: an Audit
1015: Collins Ekere – Ultrasound Scanning of RIF pain May Increase Time to Surgery and Inpatient Length of Stay.
1025: Louise Steinhoff – Breast Cancer Audit
1035: Melissa Mahoney – Replacing IV cannulae at 72 hours: An unnecessary risk?

1045-1115 Break: Coffee
Session 2: Theme – ENT and Urology

Chair – Miss Sarah Stapley

1115: Maria Papadakos – Application of the SHEFFPAT Questionnaire to Assess Patient Feedback in a Urology MDT clinic
1125: Benn Gooch - The Shape of Otoplasty in 2001 and 2011
1135: Arthur Henderson – The use of bipolar diathermy in adult epistaxis management: Using Audit to define a Gold Standard endoscopic endonasal skull base surgery (EESB)
1145: Sally Deverill – Transperineal Template Biopsies
1155: Jonathan Bird – The Implementation of the Portsmouth Tonsillitis Protocol
1205: Victoria Dawson – Late diagnosis of urological cancers; does the two week wait referral route solve the problem?
1215: Tamsin Drake – Are tethers tolerable? A pilot study to assess patient experience and perception of Tethered Ureteric Stents
1225: Caroline Boulind – A mixed methods study exploring the role of the Bang Blinding Index to assess the success of blinding in surgical randomised trials

1235-1330: Lunch

Session 3: Theme – Trauma and Orthopaedics

Chair – Mr Andrew Foggitt

1330: James Fletcher – Safely reducing imaging of ankle injuries: the benefits of using the Ottawa ankle rules
1340: William Poole – Fascia Iliaca Blocks in Neck of Femur Fractures – completion of the audit cycle
1350: Rebecka Asp – Outcomes of Radial Head Arthroplasty following Mason III and IV radial head fractures
1400: Sush Ramakrishna – Timing of CT scans in Trauma patients – Single centre experience
1410: James Hooper – An analysis of variables affecting time to CT scan in trauma patients at Poole Hospital
1420: Aneesh Mohindra – Management of Mallet Injuries
1430: Ann – Louise Lowson – Elective joint replacement and the trauma list: service improvement in a district general hospital orthopaedic department
1440: Lesley Armstrong – First Metatarsophalangeal Joint Arthrodesis

1450-1520 Break: Tea
Session 4: Theme – Miscellaneous

Chair – Mr “Billy” Jowett

1520: Janka Blanova – An audit of utilization of plastic dressing clinic.
1530: T Sanghra – Are post-operative prophylactic antibiotics being prescribed and administered according to trust guidelines?
1540: James Wigley – TraumaTutor: Perceptions of a smartphone application as a learning resource for trauma management
1550: Natalia White – Designing a cadaveric operative course for surgical trainees
1600: Charles Archer – Pre operative risk assessment

1615: Head of School – Ms Karen Nugent

Prizes and Closing Remarks
Laparoscopic APERs are associated with early postoperative recovery

Habib, H.1; Delisle, T. G.1; Odermatt, M.1; Reddy, B.1; Barry, B.1; Khan, J.1; Parvais, A.1

Minimally Invasive Colorectal Unit, Queen Alexandra Hospital, Cosham, United Kingdom.

Purpose:
Laparoscopic APERs are associated with early postoperative recovery, however long term oncological benefits when compared with open APERs remain uncertain. The study compared long term and oncological outcomes of open and laparoscopic APERs.

Methods:
Case control study, data was collected prospectively from 2001 to 2012. Inclusion criteria were elective APERs with curative intent (stage I to III). Laparoscopic cases were matched to open cases using propensity scores. Outcomes were R0 rate, estimated 3-year recurrence and overall- and recurrence-free survival rates.

Results:
123 APERs were performed during this period (37 laparoscopic, 86 open). After 1:1 matching for age, gender and stage, baseline parameters were similar (standardised mean differences of covariates or interactions < 0.25, p=0.996) in both groups (37 in laparoscopic and 37 in open group). Median follow up was 4.2 years. In comparison to conventional APER, laparoscopic APER had a similar R0 rate (89% versus 87%, p=0.72) and estimated cumulative 3 year-recurrence incidence (6% versus 8%, p=0.25). The estimated three-year overall and recurrence-free survival was 87% and 84% versus 81% (p=0.20) and 70% (p=0.18), respectively.

Conclusions:
There is no significant difference in the long term outcomes between APERs done using open or laparoscopic approach.
10 Years of Laparoscopic Cholecystectomy – Changes in Practice and Attitudes

William Maclean and Christian Wakefield

Standards
In 2006 the NHS Institute of Innovation and Improvement published “Focus on Cholecystectomy”, proposing National standards and targets for laparoscopic cholecystectomy in the UK. One such target was to achieve a 70% day case rate, at a time when the UK was performing only 6.4% of laparoscopic cholecystectomies as day cases.

Objectives
• To determine our rate of laparoscopic cholecystectomies that are performed as day case procedures.
• To understand cause for delayed discharge in those that stay for more than 23 hours
• To ensure that our day case procedures are discharged in a safe manner without increasing complications

Results
In the first series, 242 laparoscopic cholecystectomies were performed, mean age of patients was 55 (19-99), 71% females, 96% ASA I or II. Mean hospital length of stay was 2.4 days (0-22). 6 (2.5%) patients were discharged on the day of surgery and a further 79 (32%) within 23 hours of surgery, with no readmissions within 30 days of surgery.

In the second series of patients, 492 patients underwent laparoscopic cholecystectomy, age 52 (12-91), 75% females, 95% ASA I or II. 275 patients (56%) were discharged on the day of surgery and a further 146 (30%) within 23 hours of surgery, with 7 (1.4%) readmissions within 30 days of surgery. Overall conversion rate to open surgery was 4.9% for both cohorts.

Interpretation
Day case cholecystectomy is feasible and safe, in this all comers study. This has been achieved not by changes in surgical practice, but by changes in anaesthetic and peri-operative pathways, as well as staff attitudes. The identification of the complex preoperative biliary patient would improve effectiveness and appropriateness of day case laparoscopic cholecystectomy
3.

Post-Appendicectomy Readmissions Audit

Author: Dr. Phakanant Chaichanavichkij

Supervisors: Mr. Mercer (Consultant UGI), Mr. Sadek (Consultant UGI)

Background:
Appendicectomy is a frequently performed operation on the emergency theatre. Our surgical assessment unit have noted a considerable amount of patients presenting with complications relating to their emergency appendicectomy.

Objections:
This audit reviews the rate of readmission following emergency appendicectomy against the national average by the DOH, and attempts to identify any potential causes for those readmissions.

Methods:
Patients who underwent emergency appendicectomy between 2012 were identified using theatreman and PAS databases. Those readmitted to hospital within 28 days of discharge were identified and their medical records reviewed.

Results:
552 emergency appendicectomies were performed during the 12 months period, of which there were 49 readmissions, giving a readmission rate of 8.9% (7.1% DOH). Laparoscopic approach was associated with a higher readmission rate than open (9.1% vs. 5.6%). Operations performed at night were associated with a higher readmission rate than in the evening and during the day (10.3% vs. 8.3% vs. 7.9%). Operations performed by registrars were associated with a higher readmission rate than those performed by consultants and SHOs (9.9% vs 4.8% vs 3.6%). Normal intra-operative appearance of the appendix was associated with a higher readmission rate than abnormal appearance (9.3% vs. 8.4%). Causes for readmissions included intra-abdominal collections (27%), pain (23%), intra-abdominal infection (17%), wound problems (15%) and others (18%).

Conclusion:
Our department has a higher than national average readmissions rate following emergency appendicectomies.

Recommendations:
The development of a patient information leaflet may help to improve patient’s awareness of what to expect in the post-operative period and thus reduce readmission rate and also allow patients to seek help appropriately should they suspect a complication.
Diabetic Foot Infections: A Quality Improvement Project

Griffin JL, Williams RSJ, Nwoguh C, Grewal P

Background:
Diabetic foot infection (DFI) is the leading cause of hospitalization for patients with diabetes and an independent risk factor for amputation. Our aims were to investigate our compliance with recent NICE guidance, update our local microbiology guidelines in line with international guidelines and develop ways to improve the initial investigation and management of patients with DFI.

Methods:
We audited patients with DFI admitted to the surgical assessment unit over a 3 months period. Concurrently we reviewed all DFI microbiology results from 2012. An integrated pro forma encompassing prompted assessment, management and empirical antibiotic prescribing was developed and implemented.

Results:
The audit demonstrated poor initial assessment and management of patients with DFI. Only 65% of patients had any evidence of ulcer assessment, 80% had circulation assessment and 5% had severity of infection assessed. Antibiotic prescription followed guidelines in 30% of cases. Following implementation of the pro forma full patient assessment occurred in 80% and antibiotic prescribing improved to 60%.

Conclusions:
The introduction of an integrated, guideline-based clerking and management pro forma improves the process of admitting patients with DFI. Further improvements are underway and will be assessed with a long term, prospective audit.
A double blinded study to investigate the role of plasma Procalcitonin levels as an adjunct marker in clinically suspected appendicitis

Glaysher MA, Cruttenden-Wood DR, Zeidan BA, Saeed K, Miles AJG

Abstract:

**Aims:** Procalcitonin (PCT) is a peptide precursor of calcitonin, and a highly specific marker for the diagnosis of clinically relevant bacterial sepsis. Its value as a diagnostic tool in acutely unwell surgical adults has yet to be proven. This pilot study aims to determine the value of plasma PCT levels as an adjunct test in evaluating and stratifying patients' operative decision when presenting acutely with possible appendicitis.

**Methods:** A prospective double blinded pilot study over a two month interval involving 50 adults referred to the surgical take with suspected appendicitis was conducted in a DGH. Patients received the standard blood profiles, including as WBC and CRP. All clinical decisions were made without prior knowledge of PCT testing. The PCT levels were taken from the admission bloods prior to intervention. Management, operative findings and histology results were recorded. Blood results were compared to the findings to establish diagnostic value of PCT.

**Results:** The mean age was 33.8yrs (16-32). 70% were female. 24 patients (48%) had a laparoscopy; 17 had confirmed appendicitis, 1 inflamed Meckel's diverticulum, 3 ovarian cysts, 3 normal appendicies. A total of 18 patients (36%) required surgery for an underlying pathology. PCT levels were ‘highly significant’ (>0.5 mcg/l) in 50% (9/18) of patients requiring surgery. 32/50 patients ultimately did not require surgery and 100% of these patients had negative PCT levels. The PCT levels had a sensitivity of 50%, specificity of 100%, a positive predictive value (PPV) and negative predictive value (NPV) of 100% and 78% respectively. WBC & CRP levels had a higher sensitivity of 83% but the specificity reduced to 56% & 53% respectively. Diagnostic performance improved when combining tests: ‘WBC + CRP’ had a sensitivity of 100%, specificity of 34% (PPV 46%, NPV 100%); ‘WBC + PCT’ sensitivity was 89%, specificity was 53% (PPV 53%, NPV 90%). Interestingly, clinical evaluation was not statistically superior (p=0.288) as an indicator for surgery when compared to raised PCT levels alone.

**Conclusions:** High PCT level in patients with suspected appendicitis necessitates surgery. The test is highly specific and is unlikely to misclassify a sick patient as healthy. Further evaluation of PCT’s role in acute surgical conditions is crucial.
The Use of Chaperones on the Surgical Take: an Audit

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Introduction: The use of medical chaperones has come into the spotlight after the Ayling Inquiry (2004). Although primarily to support the patient, they also protect the clinician. The surgical take turns over a high volume of patients, most of whom require intimate examination. We audited our activity in this regard.

Guideline: “Intimate examinations and chaperones” (April 2013), GMC. No local policy.

Standards: 1. Offer a chaperone for 100% of intimate examinations (rectal, genital and breast) 2. Document in the medical notes the outcome of your offer in 100% of cases.

Method: Retrospective questionnaire to junior doctors (F1 to SpR grades) working in the Acute Surgical Unit at Southampton General Hospital from 18-21 March 2013. Information based on last ‘on-call’ shift.

Results: n=21 doctors (57% female; 62% F1 grade). n=79 intimate examinations: 62% rectal; 25% scrotal; 10% breast; 6% vaginal. Chaperones were offered in 87% (rectal), 65% (scrotal) 25% (breast) and 100% (vaginal) of cases. The ease of finding a chaperone was reported as follows: ‘easy’ (48%); ‘neutral’ (38%); ‘difficult’ (14%). It is our usual practice to document chaperone use explicitly (by name) in only 24% of cases.

Recommendations: It is a professional requirement to offer a chaperone for all intimate examinations. If the patient declines this should be documented in the medical notes. If the patient accepts, the name and designation of the chaperone should be documented. The surgical clerking pro-forma should have an aide memoire to prompt such documentation.
Ultrasound Scanning of RIF pain May Increase Time to Surgery and Inpatient Length of Stay.

Collins Ekere

**Aims:** Patients presenting with RIF pain can be investigated by ultrasound scanning (US). We evaluated whether use of US in this patient group delayed time to surgery and in addition, increased length of stay.

**Methods:** Using histology data from 2009-2012, we assessed 100 index cases per year, including only emergency surgeries for RIF’s pain (laparoscopic and open). PACS and electronic records were assessed for length of stay (LOS) and day of operation (DOP). Day of admission = Day0 (D0).

**Results:** Of 365 patients included, 102 had US pre-operatively: 18% DOP on D0, 41% D1 and 25% D2. Of 263 without US: 52% DOP on D0, 44% D1 and 3% D2.

Of the US group, 2% had a LOS of 1 day, 12% 2 days, 27% 3 days, 26% 4 days, and 42% >4 days. Of the without US group, 5% had a LOS of 1 day, 28% 2 days, 34% 3 days, 17% 4 days and 16% >4 days.

**Conclusions:** We showed patients undergoing pre-operative US have surgery later and have longer lengths of stay than those who do not. Accepting that this is not a prospective or randomised study, we feel that in the age of diagnostic laparoscopy, US may be delaying surgery and increasing inpatient length of stay.
Abstract: An audit looking into breast cancer referrals being seen in mastalgia clinic without imaging and adherence to locally set guidelines to ensure treatment of breast cancer in keeping with NICE guidelines

Louise Steinhoff

Introduction
Patients referred for a suspected breast cancer should under NICE guidelines be reviewed in a specialist clinic within two weeks. A further target in breast cancer care is that patients diagnosed with breast cancer should have their operation within 62 days of the original referral. At Salisbury District Hospital in view of this the aim is for all patients with breast symptoms, specifically suspected breast cancer, to be seen in a one-stop clinic where they have triple assessment: examination, imaging and either FNA or Core Biopsy, in order to ensure speedy diagnosis and surgical intervention. However due to increased pressures on the service under the two week wait a number of patients have been seen in the mastalgia clinic without access to imaging, therefore delaying initial diagnosis and treatment, causing delay in services and pressures for extra theatre lists. We wanted to know how many patients with suspected breast cancers were seen in the mastalgia clinic and whether there was a need for an extra one-stop clinic with the radiologists, to improve the service.

Aim
To undertake an audit to assess if the Breast Unit at Salisbury District Hospital is offering the one-stop service they have set as standard in order to give patient treatment in keeping with national guidelines to avoid breaches of care.

Objectives
Audit against the following standard set at Salisbury District Hospital: All breast patients with a suspected lump should be seen in a one-stop clinic. NICE state that patients with a suspected cancer should be seen in a specialist unit within two weeks. For breast cancer patients they should then have an operation within 62 days of referral. This is greatly improved if patients can be seen for triple assessment as a diagnosis is reached within two weeks of the initial encounter decreasing time to surgery.

Method
The audit was undertaken looking into the referrals coming into the breast unit over one month. GPs and referral centers have a set tick box form to use when referring patients with breast symptoms. Patients are then scored according to severity of symptoms, and a clinic appointment is booked. The number of patients who were allocated a slot in the mastalgia clinic, in order to accommodate the need for assessment under “the two week wait” were reviewed with regards to the symptoms they had originally been referred with. All patients were then grouped together according to their symptoms, and patients with symptoms requiring imaging, preferably in a “one stop” fashion were thus identified. The need for a further one stop clinic was then discussed at the breast AGM, and a repeat audit will be needed in the future to ensure improvement of service.
Results
Approximately 140 patients are referred to the Salisbury Breast Unit every month. In April, the month looked at in the audit the number reached 148. Patients are seen in two one-stop clinics a week and if need be in the mastalgia clinic which runs once every two weeks. In April there was a total of three mastalgia clinics, with 46 patients booked. Out of these patients 7 were follow ups. This meant a total of 39 patient were seen. This data supports the belief held in the breast department that a further one-stop clinic to replace the mastalgia clinic is necessary to cope with an increasing demand on the service. Therefore an agreement with the radiologists needs to be made in order to offer this service to all patients referred with breast symptoms. Increasing the population size would give further power to this audit, and once the changes have been implemented a re-audit of services would be needed to show improved standard of care for this patient group.

References
2! NICE report CG80 Early and locally advanced breast cancer: needs assessment
Replacing IV cannulae at 72 hours: An unnecessary risk?

Melissa Mahoney and Arthur Henderson

Aim:

Queen Alexandra Hospital’s (QAH) Trust guidelines state that peripheral intravenous (IV) cannulae should be removed after 72-96 hours to reduce the risk of infection and phlebitis in adults. Literature search reveals that recent Lancet and Cochrane reviews have found no conclusive evidence that changing IV cannulae at 72-96hours reduces infection or phlebitis rates. QAH VitalPac computer system records IV cannula insertion, removal and phlebitis score. In 2012, 60,791 IV cannulae were placed and recorded on VitalPac. Aim: To assess the extent to which IV cannulae are being removed and replaced at 72-96hours rather than for clinical reasons at QAH, thus subjecting patients to potentially unnecessary and harmful additional invasive procedures.

Method:

Retrospective review of VitalPac IV cannulation data from 01 January – 31 December 2012 to assess compliance with Trust guidelines, data recording on VitalPac, and the extent to which useable cannulae are being replaced at 72hours.

Outcome:

There is evidence to suggest that a significant number of cannulae are being removed for time purposes alone; in addition it is clear that there is suboptimal compliance with the current guidelines. These data suggest that the current guidelines for IV cannulation may no longer be in the best interest of patients and may expose them to unnecessary risks through further unneeded procedures. The authors aim to use this data and literature review in conjunction with the Trust Infection Control department as part of the upcoming (June 2013) review of the current guidelines.
Application of the SHEFPAT Questionnaire to Assess Patient Feedback in a Urology MDT clinic

M Papadakos, J Dockray, C White, A Adamson
Royal Hampshire County Hospital

Introduction:
A diagnosis of cancer is devastating. A busy outpatient clinic may not be the appropriate setting for patients to discuss questions and concerns. In response to this a weekly consultant-run clinic was set up in our department. Extended appointments allow patients to have their diagnosis and treatment options explained to them fully. Importantly patients meet and receive the support from specialist nurses who become their point of contact.
Our objective was to assess patient satisfaction of this service.

Methods:
The Sheffield Patient Assessment Tool (SHEFPAT) is a validated tool for assessing patient feedback. This was modified for application to the MDT clinic with 13 questions scored on a scale of 1 (negative) to 5 (positive) and an option for comments. 104 questionnaires were posted to patients who had been seen in the MDT clinic between April and September 2012.

Results:
44 responses were received with 41 available for analysis: response rate 42.3%. All responses were in the range of 3-5, with a cohort mean response of 4.8. Individual questions had a mean of between 4.6-4.9. The median score for all questions was 5. All additional comments were positive.

Conclusions:
Though we are limited by the response rate, from the data available we can see that the patients are highly satisfied with the service received.
The Shape of Otoplasty in 2001 and 2011

Department of Burns, Plastics and Reconstructive Surgery, Salisbury District General Hospital, Odstock Road, Salisbury, Wiltshire, SP2 8BJ

Dr Benn Gooch MBBS, Mr Benjamin Khoda MRCS, Mrs Diana Slade-Sharman FRCS (Plast)

An audit was undertaken to compare rates of otoplasty in 2001 and 2011. There is growing concern that numbers are falling and this having a negative impact on plastic surgery training. Aims of this audit where to compare otoplasty in 2001 and 2011, specifically differences between grade of surgeon, technique, complications, revision rates and geographical variation.

In 2001 121 operations were performed whereas in 2011 28 were performed. In 2001 the vast majority of operations were performed by trainees but in 2011 all operations were consultant led. Interestingly there were no post operative complications in 2011 whereas in 2001 there was 20% complication rate.

In terms of geographical variation there was a stark decline in all regions, priniciple amoung which was Hampshire which accounted for 64 of the 121 operations in 2001 but only 4 of the 28 performed in 2011.

Clearly there has been dramatic decreases in otoplasty rates over last decade (77%). Shift from registrar to consultant primary surgeon has also threatened training oportunities. Reduction in complication rate has in part been a consquence of reduced numbers but also more senior surgeons operating. The decline in otoplasty rates brings into question the future of this type of surgery.
The use of bipolar diathermy in adult epistaxis management: Using Audit to define a Gold Standard

Henderson A, Larkins A, Repanos C

Background:
Epistaxis represents a significant proportion of emergency ENT presentations, yet there is no well-defined ‘Gold Standard’ management protocol. Bipolar diathermy is becoming increasingly popular as a simple and effective method of managing acute epistaxis.

Aim:
To assess the benefit of an adult epistaxis protocol, including the use of bipolar diathermy.

Methods:
A protocol for the management of adult epistaxis was formulated – including the use of bipolar diathermy in preference to chemical diathermy or packing. The management of all adult epistaxis patients presenting to the Queen Alexandra Hospital, Portsmouth (Oct-Nov 2012) was then compared with the same data from Apr-May 2012, prior to protocol implementation.

Results:
61 and 63 patients were included in the pre and post-intervention groups respectively. Nasal packing reduced from 56% (n=34) to 22% (n=14) and admissions from 62% (n=38) to 38% (n=24). The mean length of stay reduced from 1.2 days to 0.83 days and overnight stays from 74 to 52 per two month period. Based upon financial analysis of the relative costs involved, this resulted in an extrapolated annual saving of approximately £40,000.

Conclusions:
Implementation of an epistaxis management protocol, including use of bipolar diathermy, can produce a significant reduction in nasal packing and hospital admission, with consequent financial and patient benefit.
An Audit of Transperineal Template Biopsies of the Prostate at Dorset County Hospital

Miss Sally Deverill

Introduction:
Transperineal Template Mapping Biopsies (TTMB) of the Prostate Gland is increasingly being used to aid diagnosis of prostate cancer in cases where trans-rectal biopsies have been consistently negative. Dorset County Hospital started TTMB in May 2012, using a modified technique, with the aim of decreasing the number of core biopsies taken without compromising diagnostic yield.

Methods:
A retrospective audit was undertaken of all patients who underwent TTMB at Dorset County Hospital between March 2012 and March 2013. Computerised records were analysed from 40 patients, aged 56-78, with PSAs ranging from 5-75, who had a history of having had 1-4 previous benign TRUS biopsies. Notes were obtained for extra information from 27/40 patients.

Results:
The average number of cores taken was 41.9 (range 25-70). 25/40 (62.5%) patients had evidence of malignancy (Gleason 6 in 9/40, Gleason 7 in 15/40, adenocarcinoma with hormonal effects 1/40). The most common complication was urinary retention following trial without catheter in recovery (6/27).

Conclusions:
This technique has comparable results to published studies in terms of detecting clinically significant prostate cancers, despite using a modified technique. However, there appears to be a higher rate of urinary retention. Local Urologists have found the unique colour-coded mapping helpful to identify clinically significant prostate cancer and to aid treatment planning.
The Implementation of the Portsmouth Tonsillitis Protocol

Bird JH, Schulz C, Lower N, Faris C. Repanos CR

Objective:
To design and implement a validated tonsillitis algorithm for use by junior doctors within a secondary care Otolaryngology unit. The aim of this study was to reduce both the admission rate and duration of hospital stay.

Study Design:
A Retrospective case note review was followed by a prospective cohort study examining tonsillitis patients within a large teaching hospital.

Methods:
126 patients diagnosed with tonsillitis within the Otolaryngology department at Portsmouth NHS Trust, UK were studied prior to and following the implementation of a novel treatment algorithm; The Portsmouth Tonsillitis Protocol.

Results:
Implementation of the protocol resulted in a reduction in both the overall admission rate (94.2% to 40%, p<0.001) and mean length of admission (36.1 hours to 13.7 hours, p <0.001). Patients admitted with Infectious Mononucleosis or those receiving a prior course of oral antibiotic therapy demonstrated no significant increase in overall rate of admission or length of stay.

Conclusion:
We present a safe, highly effective treatment algorithm for the management of acute tonsillitis in the secondary setting. Implementation has resulted in a reduced admission rate and length of hospital stay. In a healthcare system with financial targets and finite resources this protocol has the potential to benefit many hospitals.
Late diagnosis of urological cancers; does the two week wait referral route solve the problem?

Ali A, Dawson V, Hind J, Haynes S and Hayes M

Introduction:
The government introduced the two week wait (2WW) route to speed diagnosis and treatment of cancer patients. However, there is still a considerable percentage of patients who are diagnosed at late stages and are referred via either emergency or routine services.

Aim:
To investigate the proportion of urological cancers diagnosed according to the different referral routes.

Methodology:
Retrospective analysis of MDT data over a year period (March 2011-March 2012). Electronic database and patient's records were accessed to identify route of referral (GP, emergency Vs via other specialties), criteria (2ww, urgent, routine) and reason for referral.

Results:
756 new cancers were diagnosed within the given time frame (506 Prostate, 174 bladder, 53 kidney, 4 ureter, 19 testis). Nearly half of the patients diagnosed with prostate and bladder cancer were diagnosed via GP 2WW referrals - 294(58%) and 87(50%) respectively. Only 7 patients were diagnosed with renal cancer via 2WW referral. Most testicular cancer cases were diagnosed via 2WW 16 (84%), while all ureteric cases were diagnosed via routine referrals from GP.

Conclusion:
Two-week wait referral route is speeding the diagnosing time. However, it is still failing to capture the majority of urological cancers. The difficulty lies in the absence of screening programs and patients delay in presentation. Ongoing pilot in community education might serve as a part of the solution.
Are tethers tolerable? A pilot study to assess patient experience and perception of Tethered Ureteric Stents

Tamsin Drake

INTRODUCTION:
Ureteric stent placement following ureteroscopy is associated with significant morbidity. Furthermore, conventional stents require cystoscopic removal. Tethered stents can negate the need for this secondary invasive procedure, although are not routinely used in the UK. Reasons for this include concerns over accidental stent removal, and the negative patient experience of tethers. We aimed to assess whether these concerns are justified by retrospectively reviewing a cohort of patients in whom a tethered stent had been inserted post-ureteroscopy.

MATERIALS & METHODS:
82 patients (28 female, 54 male), median age 56 years (range 39-86) underwent tethered stent insertion following ureteroscopic surgery by a single surgeon between August 2009-May 2012. Patient records were reviewed for demographic and operative data, whilst patient experience and perception were evaluated by an administered survey.

RESULTS:
57 patients (70%) responded to the survey. 49 patients found the tether acceptable. 38 patients showed preference for a tethered stent, should they need a stent in the future. Stent extraction using the tethers was achieved in 73 patients (89%). 7 patients required a flexible cystoscopy for stent removal due to migrated tethers. Accidental stent displacement occurred in 2 patients, without adverse effects.

CONCLUSIONS:
Stent placement following stone surgery should be minimised. However, if the decision is made to leave a stent, tethers are well tolerated and should be considered as a means of reducing healthcare costs and stent-related morbidity.
A mixed methods study exploring the role of the Bang Blinding Index to assess the success of blinding in surgical randomised trials

Dr Caroline Bouind
ENT Dept, Salisbury District Hospital

Background:
Blinding is important to reduce bias in randomised trials using patient reported outcomes. Though frequently attempted, its success is rarely measured. The Bang Blinding Index (BBI) was designed to assess the success of blinding.

Aim:
To explore the use of the BBI in surgical trials collecting patient reported outcomes.

Methods:
Data were collected from two case studies in which the patient and research staff +/- surgeon were blinded. Patients completed the BBI and a sample were also interviewed. Data were compared and combined to assess the role of the BBI in surgical randomised trials.

Results:
In the first case study, blinding was successful with 23% more than expected by chance guessing correctly in both treatment arms. In the second study, patients in arm A were 13% more likely than expected to guess incorrectly. Fifty-eight per cent more patients than expected in arm B guessed correctly. Qualitative data suggest participants are reliable and honest in reporting beliefs about treatment allocation. Completion of the BBI was not difficult or worrying for them. Their understanding of the reasons for blinding were poor.

Conclusion:
The BBI is a simple and reliable method for the assessment of blinding success in surgical randomised trials.
Elective joint replacement and the trauma list: service improvement in a district general hospital orthopaedic department

Dr. Ann-Louise Lowson and Mr. Philip Wraighte,
St. Richard's Hospital Chichester

Background and Standards
There were concerns that the orthopaedic theatres were not starting on time despite efforts to improve theatre time usage such as the “golden patient” on the trauma list being an elective joint replacement. We audited against local standards for theatre running and inclusion of elective joints on the trauma list.

Results of first round
The elective joint was not effectively utilising theatre time at the beginning of the trauma list and there was a delay in theatre start times, representing approximately £20,400 a month in theatre running costs with no income generating activity occurring.

Intervention
We focussed on patient preparation for theatre and staff availability. It became apparent that staff job plans and contracts were not all compatible with the start times aimed for. After presenting this information to the hospital management these job plans were reviewed with the staff involved. The elective joint was removed from the trauma list from December 2012 and a new member of staff assists in preparing patients for theatre
Fascia Iliaca Blocks in Neck of Femur Fractures – completion of the audit cycle

Poole W, Gough AT

Introduction
The British Orthopaedic Association recommends that all patients who attend hospital with a fractured neck of femur should have an immediate pain assessment and given analgesia. Likewise NICE clinical guideline 124 similarly recommends that regular analgesia should be given to patients and opioid analgesia should be limited with the use of nerve blocks, given by trained personnel. Locally in Dorset County Hospital there is a neck of femur pathway which advocates the use of fascia iliaca blocks on presentation to hospital. A previous 50 patient retrospective audit conducted by the authors in October 2012 established local guidelines were not being followed and only 50% of patients attending Dorset County Hospital were getting the recommended analgesia.

Methods
50 sets of notes were prospectively reviewed on patients who sustained a neck of femur fracture between 20th December 2012 and 15th February 2013. Data on their Age, Date and time of presentation, type of fracture, laterality of injury, nerve block administration, record of what was given as a nerve block and if contraindications were documented were all recorded. Teaching was given to trainees, prior to the re-audit. Instruction was given on how to safely administer the block, local anaesthetic dosing, awareness of local anaesthetic toxicity and use and availability of intralipid.

Results
44 patients (88%) were given a Fascia Iliaca Block on admission compared to 46% on the initial audit cycle. 4 patients had contraindications to having a nerve block. This means 96% patients attending within the period of study had correct analgesia administered as per the hospital guidelines. Every nerve block administered had the volume and agent documented (100%) although 13 of 44 patients (30%) still did not have their potential contraindications documented. Both of these figures had improved from the initial audit cycle of 25% not having the volume or agent documented and 55% not having contraindications documented. An increase in number of Fascia Iliaca compartment blocks is a safe and effective method of providing analgesia to patients whilst reducing their morphine requirements.
Outcomes of Radial Head Arthroplasty following Mason III and IV radial head fractures

A R M Asp, N Jacobs, A Nicholls, D J Watkinson

The purpose of this study was to determine long term patient satisfaction and functional outcomes following radial head arthroplasty.

We present a consecutive series of 41 radial head replacements undertaken for trauma between 2002 and 2011. Patients were contacted via telephone or post and invited to undergo a clinical and functional outcome assessment by completing the Quick Dash questionnaire, Mayo Elbow Performance Score functional outcome measures and a Visual Analogue score for pain. Their clinical records and available radiographs were also reviewed. Metalwork was removed in 5 patients due to loosening and subsequent failure so the final results for these patients have been excluded. The study population demonstrated functional recovery with mean range of flexion of 126.9 degrees (standard deviation 25.6), extension of 22.2 (standard deviation 18.7), pronation of 70 degrees (standard deviation 19.3) and supination of 64 degrees (standard deviation 21.7). Radiographs revealed heterotrophic ossification in 7 patients. Radiocapitellar wear was seen in 16 patients. Radiolucrency was seen in 4 patients and loosening of the prosthesis was seen in 7 patients.

The Corin prosthesis used in patients following a Mason III or IV radial head fracture has shown to be advocated in the long term with respect to patient satisfaction and functional outcomes.
Timing of CT scans in Trauma patients – Single centre experience

S Ramakrishna, J Griffiths, C Mears, L McMenemy, CP Lewis

Background

The Trauma Audit And Research Network (TARN) have identified a target that all full body CT scans for the assessment of acute trauma patients should occur within 1 hour of admission while NICE have suggested that all head CT for trauma should also occur within the first hour of admission.

Aim

To determine the timing of CT scans in trauma patients presenting to the Emergency Department at Queen Alexandra Hospital, Portsmouth.

Methods

A prospective audit between Sep 2012 and April 2013. Review of case notes of trauma patients who underwent CT scans. Time of request, time of scans and time of reporting were recorded.

Results

In the first loop (n=30), the mean time to scan was 1 hour 37 minutes. The mean time to report was 5 hours 26 minutes. 60% of the scans were done during out-of-hours. The results and interventions were highlighted to clinicians. In the second loop (n=49), the mean time to scan was 1 hour 18 minutes and the time for report was 3 hours 15 minutes. Less than 40% of the scans were done during out-of-hours.
An analysis of variables affecting time to CT scan in trauma patients at Poole Hospital

Mr James Hooper (second cycle data collection, all statistical analysis, abstract) Mr James Logan, Mr Shahid Kiani, Miss Sarah Wilcock (first cycle data collection shared)

Abstract
Trauma is the leading cause of morbidity and mortality in young adults. Early use of crosssectional imaging is a factor which improves outcome, and guidance suggests that CT scans should be performed within one hour of admission. An initial study suggested there was scope for improvement in trauma management at Poole Hospital, and this follow-up aimed to determine whether there has indeed been change.

Records of all 40 patients who underwent CT scans for trauma over a six month period were studied to determine the reason for the scan, times at specific treatment points, grade of lead physician, initiation of trauma call etc. This study was repeated six months later, after the location of the CT scanners had moved closer to the Emergency Department.

There has been a deterioration in median time from admission to CT scan (73mins vs. 90mins), but not significantly (p=0.97). 35% of patients were scanned within 60 minutes initially, vs. 27.5% in the re-audit. 41% of admissions were lead by a consultant initially, vs 37.5% in the reaudit.

If treatment was lead by a consultant rather than a middle grade it significantly reduced time to CT (55mins vs. 122.5mins, p=0.0001). In 22.5% of cases a trauma call was put out, which was associated with significantly shorter time to CT (76mins vs. 117mins p=0.0214).

This study, whilst auditing performance during trauma situations at Poole Hospital, demonstrates interesting statistical associations between clinical variables which may be generalisable to other hospitals and could be used to guide future policy.
Management of Mallet Injuries

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Salisbury District Hospital

Mallet injuries of the fingers are commonly seen in the plastic trauma clinic. There are two treatment strategies: Conservative management in a splint continually for 6 weeks and then re-assess; or surgically where either wires or screws are used to return continuity.

Based on current guidance, we reviewed our compliance and outcomes with best practice. Mallet injuries should be managed conservatively unless there is marked subluxation of the distal fragment or if the dorsal fragment was greater than 50% of joint surface.

We identified 67 patients over a two-year period of which 61 patients were suitable for our audit. Fifty-four patients completed follow up. We found that in our department, over that period that based above best practice, 92.6% of patients that should have had non-operative management were treated appropriately. However 42.2% percent of patients that should’ve been operated upon, were managed non-operatively.

Secondary outcome measures of distal fragment extensor lag were also measured which demonstrated that non-operative patients developed a lag in 25% of the patients. However this did not imply any functional deficit. As a result of the audit, departmental consensus was established to ensure consistency in management of these injuries.
Title: 1st metatarsophalangeal joint arthrodesis; screws or plates, does it matter?

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Background:
1st MTP joint arthrodesis is a commonly performed operation using screws and/or plates to stabilise the joint. Non-union is a recognised complication.

Aims/objectives:
We aimed to assess whether underlying pathology, fixation technique or sex of the patient had an influence on incidence of non-union.

Methods:
We identified patients who had undergone 1st MTP fusions from 2008-13 under the care of the senior author. We measured pre operative hallux valgus angles. The surgical technique used for fusion was assessed from X Rays. Pre and post operative AOFAS hallux scores were collated for patients where available.

Results:
103 MTP fusions were included. There were 9 cases of non-union (8.7%): 5 of 56 fixed with dorsal screws (8.9%) and 4 of 16 fixed with cross screws (25%). There were no cases of non-union using plate fixation (0/31). In patients with mild hallux valgus (<20°), the non-union rate was 0.3%, in moderate hallux valgus (20-40°) 18.6% and in severe hallux valgus (>40°) 0%. The non union rate in males was 4/16 (25%) and in females 5/87 (5.7%).

Discussion:
We suggest that surgeons have a low threshold for using plate fixation in male patients and in females with a hallux valgus >20°.
Safely reducing imaging of ankle injuries: the benefits of using the Ottawa ankle rules

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Background
Ankle injuries account for 5% of A&E visits in the UK, yet only approximately 15% have a fracture.

In 1993, Stiell et al. developed the Ottawa Ankle Rules (OAR) to reduce the number of unnecessary ankle radiographs taken by developing a highly sensitive, simple clinical examination guide, based on pain, tenderness and ability to bear weight.

A 2003 BMJ meta-analysis showed the rules have a sensitivity of almost 100% and reduce ankle x-rays by 30-40%.

Method:
Using retrospective data collection, followed by education and then prospective data collection, the assessment of patients presenting with ankle injuries was analysed.

Computer records (on patient tracking system ‘Symphony’) were analysed for suitable patients where the Ottawa Ankle Rules’ criteria had been used. Patients were excluded if they were under 18 years old, had distracting injuries, gross ankle swelling, decreased sensation or intoxicated. The governance of the audit involved clinicians and clinical audit staff. 120 patients were audited in each round of data collection, generating 64 and 57 patients in each round at Ealing, and 100 patients in each round at Salisbury.

All clinical staff members in the department were then educated through small group teaching and posters. The management of ankle injuries was then re-audited the following month. (This was undertaken during March and June 2010 in Ealing, and February and May 2012 in Salisbury).

Results:
Initial use of OAR was 29/64 (45%) in Ealing and 72/100 (72%) in Salisbury. Following interventions, these figures increased to 45/57 (79%) and 87/100 (87%) respectively.

In Ealing there was a similar use of x-ray before and after interventions, 54/64 (81.3%) versus 47/57 (82.5%), however the fracture-positive radiographs increased from 4/52 (7.7%) to 8/47 (17.0%).

In Salisbury, the use of x-ray reduced after interventions 90/100 (90%) to 85/100 (85%), whilst still detecting the same number of fractures 16/90 (17.7%) versus 16/85 (18.8%).
Conclusion:
Both data sets show a reduction in the use of unnecessary x-ray in assessing ankle injuries; in Ealing there was a much higher fracture rate for the same use of x-ray and in Salisbury there was a reduction in the number of x-rays used for the detection of the same number of fractures.

Discussion
Whilst clinical concern should override, use of the Ottawa Ankle Rules can safely reduce the number of unnecessary radiographs. This saves time, money and avoidable irradiation, with a low likelihood of missing a fracture.
An audit of utilization of plastic dressing clinic.

van der Veen J., Exton R., Green S., Durrant

The Plastic Department, Queen Alexandra Hospital, Portsmouth has experienced an increasing demand for plastic dressing clinic appointments. This has resulted in overbooking of appointments (by 91 slots in 03/13), which in turn has lead to delays in clinic appointments, poor patient satisfaction with the service, and a high pressure and stressful working environment for specialist staff. An audit of the plastic dressing clinic service was undertaken in March 2013. During this period all patients seen in the plastic dressing clinic were recorded together with the reason for their appointments, treatment and follow up. The data was analyzed and results showed that during this period 197 patients were seen in the clinic. Of these patients 70 patients (35.5%) would have been suitable for follow-up at primary care services (such as simple wound checks, removal of sutures). Follow-up at the appropriate services provides better care for patients and allows specialist staff to focus on patients requiring specialist care. To address the findings a guideline and flow chart for booking a plastic dressing clinic appointment was created and distributed throughout the department. A re-audit is currently taking place and preliminary results are showing improvements in utilization of the service and a decrease in unnecessary appointments.
Are post-operative prophylactic antibiotics being prescribed and administered according to trust guidelines?

Dr Sophie Tate and Dr Tanj Sanghera

AIM:
UHS NHS Trust has guidelines setting out indications for, choice and duration of post-operative antibiotic prophylaxis. We observed that there was inconsistency in the prescription and administration of this prophylaxis. This raised concerns for immediate post-operative morbidity and mortality of individual patients, but also the wider population as imprudent use of antibiotics leads to the development of resistant organisms.

METHOD:
We conducted an audit of post-operative antibiotic prescription and administration in vascular and orthopaedic patients. Significant delays and omissions were identified and root-cause analysis carried out. Modifiable causes for delay were identified; inconsistency in the clinician prescribing the antibiotics and timing of the prescription and unfamiliarity with the ePrescribing program leading to incorrect prescriptions. We circulated the results to clinicians and agreed with clinical leads that anaesthetists will be responsible for the prescription of post-operative antibiotic prophylaxis. We have provided training to anaesthetists on the guidelines and ePrescribing program.

RESULTS:
The initial audit demonstrated a mean delay of 4 hours 12 minutes in receiving the first post-operative dose of antibiotics. We will re-audit following our interventions and anticipate that this delay will be reduced and that patients will benefit from appropriate and timely administration.
TraumaTutor: Perceptions of a smartphone application as a learning resource for trauma management

Mr James Wigley, Mr Saran Shantikumar, Mr Stuart Blagg

Aim:
We investigated perceptions of a new smartphone application (app) as a learning resource.

Method:
We developed TraumaTutor, an iPhone™ app consisting of 150 questions and explanatory answers on trauma management. This was used by 20 hospital staff that either had a special interest in managing trauma or who were studying for relevant exams, such as ATLS™. A subsequent questionnaire assessed users’ experience of smartphone applications and their perceptions of TraumaTutor.

Results:
Of those surveyed, 85% had a device capable of running app software, and 94% these had used apps for medical education. Specific to TraumaTutor, 85% agreed that it was pitched at the right level, 95% felt that the explanations improved understanding of trauma management, and 100% found the app easy to use. In fact, on open questioning, the clear user interface and the quality of the educational material were seen as the major advantages of TraumaTutor, and 85% agreed that the app would be a useful learning resource.

Conclusions:
Smartphone applications are considered a valuable educational adjunct and are commonly used by our target audience. TraumaTutor shows overwhelming promise as a learning supplement due to its immediacy, accessibility and relevance to those preparing for courses and managing trauma.

Category:
Surgical training and education
Designing a cadaveric operative course for surgical trainees

Natalia White

Have you ever wanted to design and deliver an operative course for fellow surgical trainees? I report my experience in designing a course for Plastic Surgery trainees aimed at extending their operative skills in limb and facial reconstruction surgery using fresh cadaveric specimens in a safe environment with Consultant supervision. I will describe the use of fresh cadaveric specimens kindly donated to medical education, the facilities and licenses required to do this, how to approach the organisation and funding of such an event and the common pitfalls to avoid. The planned 3-day course will be taking place in Spring 2014 at Salisbury District Hospital. I hope that the account of my experiences will inspire others to apply this useful educational medium to other areas of surgery for which they have a passion.
# Preoperative Risk Assessment Audit

**Dr Charles Archer, Poole General Hospital, Poole**

**Introduction/Aims:**
In 2011 the Royal College of Surgeons published the Higher Risk General Surgical Patient document which gives guidelines on identification and standards of care for high risk patients. The aim was to audit current practice against these guidelines.

**Method:**
Patients who underwent an urgent/emergency laparotomy between July and November 2012 were identified using the hospital electronic records. Their notes were reviewed for formal preoperative risk assessment and calculated retrospectively using P-POSSUM if absent. The standards for all high risk patients (i.e. predicted mortality >10%) were consultant anaesthetist and surgeon supervision of the laparotomy and post operative critical care admission.

**Results:**
29 sets of notes were reviewed. 6.9% patients had a formal risk assessment pre-operatively. Retrospective risk assessment showed that 24% were high risk. Of these patients a consultant surgeon was present in 86% and a consultant anaesthetist in 43% of cases. Post operatively 86% of patients were admitted to ITU. Predicted mortality was 32.7% with actual mortality of 28.6%.

**Outcomes:**
Preoperative risk assessment is not routine clinical practice. Otherwise results were positive but to formalise the risk assessment process, an emergency laparotomy pathway is being developed. This pathway will also be used to develop standards for preoperative investigations, optimisation and post operative management.