time to arrival from onset of symptoms was 2.9 days (0-8). Subsequent diagnoses were necrotising enterocolitis (32%), Hirschsprung's disease (14%), malrotation/volvulus (14%), intestinal atresia (5%) and spontaneous bowel perforation (5%). Only 5 (22%) patients had no diagnosis made after investigation. 2 patients had sepsis but no surgical pathology.
Results: Overall 68% of patients required laparotomy. Laparotomies were performed for necrotising enterocolitis (43%), Hirchsprung's disease (21%), malrotation/volvulus (21%), intestinal atresia (7%) and spontaneous bowel perforation (7%). Operative mortality was 13%. Overall mortality was 14%.
Conclusion: These findings confirm the importance of prompt referral, transfer and investigation of neonates with bilious vomiting as the mortality and likelihood of a significant diagnosis requiring surgical intervention is high.

0131 EVIDENCE FOR RISK RELATIONSHIP BETWEEN GALLSTONE SIZE AND PANCREATITIS

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Introduction: Gallstones pancreatitis can be a very serious condition we investigate if there is relationship between this risk and stone size in the retrieved gallbladder of those patients who have had cholecystectomy.
Methods: Retrospective analysis of cholecystectomies performed between Oct 2004-Aug 2009. Hospital coding system used to identify those patients with gallstone pancreatitis. Histology database also used for data collection. Correlation with pre-operative ultrasound gallstone size made.
Results: 1085 cholecystectomies performed in the study period, the indication for gallstone pancreatitis were for 92 patients (8.5%). Median stone size in non pancreatitis group was 14mm, median stone size in pancreatitis group was 7mm, $p<0.05$ When grouped together, number of patients with gallstone size <7mm $= 210$, incidence of pancreatitis was 59(28%). Number of patients grouped together with gallstone size with gallstone size >6mm $=875$, incidence of pancreatitis was 33(3.8%), $p<0.05$
Conclusion: Those patients who have developed gallstone pancreatitis have significantly smaller gallstones than those who do not. Those patients, as a group, who have gallstone size less than 7mm have a significantly greater incidence of gallstone pancreatitis. It is these patients that should be targeted pre-pancreatitis event and treated promptly with cholecystectomy.

0132 PRE-OPERATIVE NEUTROPHIL-LYMPHOCYTE RATIO PREDICTS SURVIVAL FOLLOWING MAJOR VASCULAR SURGERY

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Background: The systemic nature of atherosclerosis compromises medium-term survival following major vascular surgery. Neutrophil-lymphocyte ratio (NLR) is a simple index of systemic inflammatory burden which correlates with survival following percutaneous coronary intervention.
Methods: Patients undergoing elective major vascular surgery in two tertiary vascular units were identified from prospectively maintained databases. Factors associated with two-year mortality were assessed by univariate and multivariate analyses.
Results: Over a four-year period, 1021 patients underwent elective major vascular surgery (carotid endarterectomy, abdominal aortic aneurysm repair, lower limb revascularisation). Two-year mortality was 11.2%. In multivariate analysis, preoperative NLR > 5 was independently associated with 2-year mortality (multivariate odds ratio 2.21; 95% CI 1.22 to 4.01).
Conclusion: Pre-operative NLR identifies patients at increased risk of death within two years of major vascular surgery. This is only the second study in the published literature to demonstrate this relationship. This simple index may facilitate greater monitoring and targeted preventive measures for high-risk patients.

0136 ULTRASOUND ESTIMATED BLADDER WEIGHT AND MEASUREMENTS OF BLADDER WALL THICKNESS IN HEALTHY ASYMPTOMATIC MEN

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Aims: To identify measurements of ultrasound derived bladder wall thickness (BWT) and bladder weight in healthy asymptomatic male volunteers
Methods: 100 healthy male volunteers underwent transabdominal ultrasound measurements of BWT and bladder weight, using the BVM 9500 bladder scanner (Verathon Medical, Bothell, WA), at a variety of bladder filling volumes. The effect of bladder filling on these measurements was investigated. The data was explored for any correlation between measurements of BWT and ultrasound estimated bladder weight (UEBW) with subject age, height, weight, body mass index (BMI), and the ICIQ M-LUTS, IPSS and IPSS QoL symptom questionnaires.
Results: Several statistically significant but weak correlations were observed: BWT and weight ($r=0.216$, p0.032); BWT and BMI ($r=0.246$, p0.014); UEBW and weight ($r=0.304$, p0.002); UEBW and BMI ($r=0.260$ p0.009). BWT consistently thinned with increasing bladder filling volume. In contrast UEBW remained stable throughout bladder filling. The normal range for UEBW was determined as 23-43g, with a mean UEBW of 33g.
Conclusion: Whilst BWT is affected by bladder filling volume, UEBW remains relatively stable thus providing a more practical clinical tool. Normal values for UEBW in healthy asymptomatic men are presented.
Source of funding: Research Grant provided by Verathon Medical.

0137 ULTRASOUND ESTIMATED BLADDER WEIGHT IN MEN ATTENDING THE UROFLOWMETRY CLINIC

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Aims: To assess the diagnostic role of ultrasound estimated bladder weight (UEBW) in men with LUTS attending the uroflowmetry clinic
Methods: 100 men with LUTS attending the uroflowmetry clinic underwent transabdominal measurement of UEBW. Any association between maximum flow rate (Qmax) and the variables; UEBW, age, height, weight, BMI, voided volume, post-void residual urine and symptom scores (ICIQ M-LUTS, M-LUTS voiding, M-LUTS incontinence, IPSS, IPSS QoL), was investigated. A one-way ANOVA was performed to assess any difference in mean UEBW between three patient groups (Group1=Qmax<10, Group 2=Qmax 10-15, Group 3=Qmax>15).
Results: Statistically significant negative correlations between Qmax and age ($r=-0.308$, $p=0.002$), M-LUTS voiding ($r=-0.298$, $p=0.003$), IPSS ($r=-0.295$, $p=0.003$) and post-void residual ($r=-0.213$, $p=0.033$) and a statistically significant positive correlation between Qmax and voided volume ($r=0.503$, $p<0.01$) were observed. No association between Qmax and UEBW was observed ($r=0.12$, p0.243). Mean UEBW for the three groups was similar. One-way ANOVA identified there was no statistically significant effect of UEBW on Qmax $F(2, 97) = 0.175$, p0.840.
Conclusion: Mean UEBW did not differ significantly between the three Qmax groups. UEBW does not provide additional diagnostic information in men with LUTS attending the uroflowmetry clinic.
Source of funding: Research Grant provided by Verathon Medical.

0138 NHS BUDGET CUTS PUTTING PATIENTS AND SURGEONS AT RISK: BIOGEL VS. PROTEGRITY GLOVES

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Introduction: The Biogel double glove system alerts one to a breach in the outer glove during surgery by the appearance of a dark spot in the presence of fluid. The introduction of Protegrity gloves, a cheaper variety has raised concerns amongst surgeons and theatre staff. This study compares the effectiveness of the two brands.

Methods: The palmar aspect of the outer gloves was pierced and each system was worn by a blinded demonstrator. A blinded observer was then given 2 seconds to identify any breach. If none was identified an extended period of observation was permitted. Forty observations were made for each glove system.
Results: In the Biogel group, 37 out of 40 breaches were identified within 2 seconds, with 3 discovered on extended observation. In the protegrity group, 25 out of 40 breaches were identified initially, with 4 on extended observation. Using the chi-squared test, Biogel is shown to perform significantly better on both immediate inspection ($p=0.0032$) and extended observation ($p=0.0012$.)
Conclusion: Using Protegrity gloves >25% of breaches during surgery may be missed. The use of these new gloves represents a significant decrease in patient and doctor safety and we recommend a return to the use of Biogel gloves.

0139 EXPOSURE TO UROLOGY IN UK MEDICAL STUDENTS. TIME FOR CHANGE?

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Introduction: Urology accounts for 20% of acute surgical referrals. It is undersubscribed for specialist training. Lack of exposure at undergraduate level may be responsible. We assessed UK medical students' exposure to Urology.
Methods: 32 UK medical schools were contacted. Final year students were asked to complete an online survey about their Urology exposure.
Results: 610 responses received (median 18 per medical school).
Experience - 42% of respondents had a compulsory clinical attachment in Urology, lasting on average 1 week. Attendance at common Urological activities was >50%, but 6% had not attended any.
Teaching - >80% had been taught about common Urological topics, except for Urological emergencies (62%). Lectures were the main teaching method. 87% received teaching from Urologists.
Confidence - respondents felt confident managing most Urological problems, but 32% felt 'not very confident' with Urological emergencies.
Careers - 25% of respondents were considering surgery as a career, 14% for Urology. Reasons for not choosing Urology include other careers choices, lifestyle issues and inadequate knowledge/ experience.
Conclusion: Teaching and clinical experience in Urology are not compulsory in UK medical schools and exposure is variable. Final year students lack confidence in managing Urological emergencies. There is need for a Urology undergraduate curriculum.

0142 SILENT CEREBRAL EVENTS IN ASYMPTOMATIC CAROTID STENOSIS

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Background: There is a need to identify individuals with asymptomatic carotid stenosis at high risk of future ischaemic events to improve the benefit of intervention in this group. We examined the evidence for subclinical microembolisation and silent brain infarction in the prediction of stroke in asymptomatic carotid stenosis using transcranial Doppler (TCD), computed tomography (CT) and magnetic resonance imaging (MRI).
Methods: The review was conducted according to PRISMA guidelines. 58 articles regarding humans between 1966-2010 were identified through systematic searches of Pubmed, MEDLINE and EMBASE electronic databases.
Results: A median of 28% of microemboli positive patients experienced a stroke or transient ischemic attack (TIA) during follow-up versus 2% of microemboli negative patients ($p= 0.001$). A median of 10% of microemboli positive patients experienced stroke alone versus 1% of microemboli negative patients ($p= 0.004$). No convincing data exists for routine use of CT to predict stroke or TIA. There are no prospective MRI studies linking silent infarction and stroke risk.
Conclusion: There is level 1 evidence for the use of TCD to detect microembolisation as a risk stratification tool. This technique requires further investigation as a stroke prevention tool and would be complemented by improvements in carotid plaque imaging.

0144 MICROSURGICAL TRAINING – THE NEWCASTLE EXPERIENCE

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Introduction: Proficient microsurgery requires adequate training. However, there is little literature regarding outcomes when trainee surgeons perform microsurgery. We present our unit's experience.
Methods: Data was prospectively collected on all free flaps performed in Newcastle Hospitals from January 2007-December 2010. Demographics and surgical outcomes were analysed.
Results: 409 patients underwent free flap surgery. 382 (239 female, 143 male) patients had surgeon specific details recorded. Of these, the median age was 53 years (1-96). Operative indications included: breast reconstruction (n=170), head & neck oncology (n=109), lower limb trauma (n=33) and other (n=70).
The percentage of trainees performing flap raising was 40.6%(155/382), arterial anastamosis was 19.9%(76/382), first venous anastamosis was 13.1%(50/382), second venous anastamosis was 45.6%(31/68) and vessel preparation was 10.7%(41/382). We subdivided our results into TRAM, DIEP, ALT, RFF, LD and other flaps.
The median operative and ischaemic times were 487.7 ± 116 and 77.9 ± 35.1 minutes, respectively. No statistically significant difference was found in operative time, ischaemic time, complications or return to theatre rates when microsurgical procedures were performed by Consultants or trainees.
Conclusion: In our unit operative time, ischaemic time and complications do not appear significantly increased when parts of microsurgical operations are performed by surgeons in training. These findings provide a baseline for future studies.

0148 KARYDAKIS FLAP IN THE TREATMENT OF PILONIDAL SINUS DISEASE

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Background: Pilonidal sinus disease (PSD) involves chronic granulomatous infection thought to be caused by penetration of a foreign body, usually hair, into the subcutaneous tissues. Surgical treatment of chronic PSD is controversial, with variable rates of complications. The Karydakis procedure is an asymmetrical flap that avoids a midline wound. This study looks at our experience with the Karydakis procedure.
Methods: Patients with PSD who had an elective Karydakis procedure performed by a single surgical firm were identified between 2001 and 2008. These case notes were then reviewed to compile data regarding complications, primary healing rates, and recurrence.
Results: 38 patients were identified as having primary closure with Karydakis flap. 2 patients experienced recurrence, 3 developed a haematoma, 1 developed a seroma, and 4 superficially infected.
Conclusion: In the current study, > 90% of cases were asymptomatic at follow-up appointment. The low rates of complications (10 – 20%) and recurrence (5%) in the audit are comparable with other reports. The low incidence of post-operative complications and recurrence in this series emphasize the benefits of the Karydakis technique in the surgical treatment of PSD. This audit adds further evidence this straight forward technical procedure should be being adapted in other centres.

0162 SURGICALLY PLACED WOUND CATHETERS (SPWC) AND LOCAL ANESTHETIC INFUSION IN BREAST SURGERY – EFFICACY AND SAFETY ANALYSIS

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Background: The effectiveness of surgically placed wound catheters (SPWC) and local anesthetic infusion in the management of post-operative pain