been attempted. However these procedures are potentially high risk. In many cases the only alternative is amputation. We ask whether the benefits justify the risks.

Using a prospectively compiled database we identified patients undergoing simultaneous aortoiliac and infrapopliteal bypasses between January 1996 and January 2011 at a single district general hospital. There were 38 multi-level procedures performed on 32 patients. Indication for surgery was acute ischaemia in 10 (26.3%), critical ischaemia without tissue loss in 10 (26.3%), with tissue loss in 10 (26.3%), and claudication in 2 (5.3%). In 26 (68.4%) cases inflow was restored using a direct aortoiliac or aortofemoral reconstruction. In the remaining 12 (31.6%) an extra-anatomic bypass was constructed. In 1 (2.6%) patient died within 30 days of surgery. 36 (94.7%) patients survived to discharge. 34 patients (89.5%) were alive 1 year after surgery. Limb salvage was 97.3% at 30 days, 85.3% at 1 year and 76.7% at 5 years. In total 12 (35.3%) patients required amputation at total of 21 further ipsilateral vascular procedures. Our results demonstrate good long term results with acceptable levels of post-operative mortality.

**0627: PATIENTS FROM DIFFERENT SURGICAL SPECIALITIES HAVE A UNIQUE PROFILE OF PREDICTED MORBIDITY**

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**Aim:** POSSUM scores have been extensively utilised as an audit tool to compare predicted with actual outcomes. ‘Copeland’s Risk Adjusted BarometerTM’ (CRAB) is a commercially available analysis tool which allows calculation of POSSUM risk profiles using validated surrogate markers. It is generally accepted that vascular surgery patients have a high frequency of co-morbidities however there is little data comparing predicted risk profiles of different surgical specialties. Data was analysed to compare predicted morbidity for vascular, colorectal, orthopaedic and general surgical procedures.

**Methods:** Central HES data for 8559 non day case procedures performed at a single district general hospital (March 2010 - August 2011) was analysed using CRAB software (Version 1.2.5.665). Procedures from each speciality were grouped as either: low risk (0-29% risk of complication), medium risk (30-69%) or high risk (70-100%).

**Results:** Vascular procedures tended to be high risk (25.2%, 30/119) compared to general (6.5%, 320/4932, p = <0.0001), colorectal (10.5%, 70/ 594, p = 0.0004) or orthopaedic surgery (8.8%, 250/2594, p = <0.0001).

**Conclusions:** Vascular surgical procedures are at higher risk of POSSUM predicted morbidity than general, colorectal or orthopaedic procedures at this hospital. Individual specialties would appear to have unique profiles with respect to predicted complication risk.

**0634: DESIGN AND VALIDATION OF AN ERROR CAPTURE TOOL FOR QUALITY EVALUATION IN THE VASCULAR AND ENDOVASCULAR SURGICAL THEATRE**

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**Introduction:** The unique and complex vascular/endovascular theatre environment is associated with significant risks of patient harm and procedural inefficiency. Evaluation is crucial to improve quality. This study attempted to design an efficient, reproducible tool for error capture and categorisation.

**Method:** Relevant published literature and field notes from over 250 hours of complex arterial surgery were analysed. A comprehensive log of errors was compiled and twelve vascular experts graded these for their potential to disrupt procedural flow and cause harm. This led to the development of the Imperial College Error CAPture (ICECAP) tool. ICECAP was validated (21 consecutive arterial cases) as an observer-led error capture record (two observers) and as a prompt for surgical teams.

**Results:** Six primary categories and 20 error sub-categories were determined as the most frequent and important vascular procedural errors. Using the ICECAP record, the number of errors correlated well between observers (Spearman rho=0.984, p<0.001). Both observers correctly identified all moderate and severe errors and categorised these identically. Self-reporting without prompts identified 24.4% of errors, whereas surgical teams reported 60.7% of errors using ICECAP error-categories.

**Conclusion:** The ICECAP tool may be useful for capturing and categorising errors that occur during vascular/endovascular procedures and as an error recall prompt for self-reporting by vascular teams.

**0635: PREDICTING THE POST-OPERATIVE PATHWAY: DO CLINICAL TEAMS IN VASCULAR SURGICAL UNITS HAVE A SHARED MENTAL MODEL?**

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**Aim:** To ascertain if surgeons, anaesthetists, ward doctors and nurses share a mental model of anticipated post-operative patient outcomes following major vascular surgery.

**Method:** The mental models of clinicians from two units were assessed, shortly after the surgery, by asking them to rate the likelihood of patient complications in the first 72 hours post-operatively using a Likert scale. They also indicated their source(s) of information. Routine documentation was examined for information on patient outcomes. Kappa Analysis was used to measure agreement and Logistic Regression to analyse predictive value.

**Results:** 58 clinicians caring for 23 patients participated (97.5% response rate). Mental model agreement was moderate across the theatre team, but poor in the ward team and the team as a whole. Participants reported their views were informed from their own speciality’s documentation. Prior experience and handovers were also important for the ward team. Only the nurses’ mental model was predictive of patient outcomes (P=0.009).

**Conclusion:** Situation awareness is essential for post-operative planning, management and ultimately patient outcomes. These findings suggest that the shared mental model of key clinicians caring for post-operative vascular patients is incomplete. Further work is required to explore methods for sharing mental models across clinical teams.

**0710 – WINNER OF ASIT-ROULEAUX CLUB PRIZE: EVAR – PATIENT DECISION MAKING. HOW WELL INFORMED ARE YOUR PATIENTS?**

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**Introduction:** EVAR technology is pushing the boundaries of medicine and patients are increasingly using the internet to obtain medical information. This study assesses the quality of medical websites with information on EVAR.

**Methods:** We searched the keywords “endovascular aneurysm repair” and “evar” in Google, Yahoo and MSN/Bing and the top 150 websites were evaluated. Exclusion criteria were irrelevant information, repetition or inaccessibility.

**Results:** Twenty six websites were analysed: mean GFI = 12.12.S.D:1.98 showed the average website was similar to reading the Wall Street Journal. The mean FRES was 50.53(S.D:10.02), below the universally recommended target of 60-70. The results of the LIDA medical website validation tool were; accessibility 76.85%, usability 60.23% and reliability 52.27%.

**Conclusion:** We have shown that readability scores of the websites are poor suggesting that they may not be clearly understood. In addition, we have found the reliability to be very variable and generally poor. It is essential that we guide and help patients identify reliable sources of information.

**0735: SUCCESSFUL PREDICTION OF ENDO-VENOUS ABLATION (EVA) OF GREAT SAPHENOUS VEIN (GSV) OUTCOMES AND THE REQUIREMENT FOR STAB AVULSIONS WITH THE TOURNIQUET TREDELEMBERG TEST**

Charanjit Singh Milku, Celia Rigal, Sophie Renton, Tahir Hussain, David Greenstein. Northwick Park Hospital, Harrow, UK

**Aim:** The aim of this study was to assess the predictive value of the touriquet test for EVA of GSV outcomes and the requirement for stab avulsions.

**Methods:** 19 patients (10 men, 9 women) with GSV reflux and no short saphenous or deep system venous disease were prospectively recruited in the study; mean age 52 yrs (range 32-84). All patients presented with visible varicosities and skin changes; mean CEAP score was 3.36 (range 2-5). Pre-EVA,
the number of varicosities before and after the tourniquet Trendelenberg test was recorded. All patients underwent EVA of the GSV under local anaesthetic without stab avulsions. At 6-weeks post-EVA, the number of residual varicosities were recorded and compared to the pre-operative findings.

**Results:** The mean number of varicosities observed pre-EVA was 5.7 (range 1-11) before and 1.5 (SD 1.4) after the Trendelenberg Test, versus 1.4 (SD 1.2) post-EVA. Mean difference between the pre-EVA and post-EVA groups was -0.2 (95% CI -0.7 - 0.4); p=0.55 (paired T-test). The Trendelenberg test showed a positive correlation in predicting the number of varicosities post-EVA (pearson coefficient: 0.64; p=0.001).

**Conclusions:** The tourniquet test is a valuable bedside tool in determining the outcome post-EVA and the need for stab avulsions.

**0753: RUPTURED ABDOMINAL AORTIC ANEURYSMS: DECREASING INCIDENCE MAY AFFECT THE IMPACT OF SCREENING**

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**Background:** Ruptured Abdominal Aortic Aneurysm (AAA) is a significant cause of death and recent evidence has shown that screening is beneficial in reducing mortality.

**Aim:** The aim of this study was to evaluate the number of ruptured AAs, and the associated mortality, that presented to a tertiary vascular surgery unit each year.

**Methods:** A retrospective review of operative records from 1987-2009 was conducted.

**Results:** 888 Patients (Male 728, Female 158) were identified. The number of ruptures remained constant from 1987-2001, with a mean of 43.4 ruptures a year (95% CI 40.1-46.7). This decreased to a mean of 29.63 per annum (95% CI 24.3-34.6) in 2002-2009. The average mortality was 39.8% and showed no significant decrease; a mean of 41.1% (95% CI 38-44.2) in 1995-2001 and 38.6% (95% CI 33.4-43.8) during the period 2002-2009.

**Conclusion:** This data series showed patients that reach hospital have a significant mortality which has not decreased during the study period. This study further suggests that the incidence of ruptured AAs is decreasing. These results suggest that AAA screening may not be as beneficial and cost effective as previous studies have shown.

**0808: ENDOVENOUS RADIOFREQUENCY ABLATION IN OCTOGENERIANS – SAFE, EFFECTIVE AND RECOMMENDED**

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**Aim:** Varicose vein surgery aims to reduce venous ulcer recurrence and encourages healing to those resistant to compression therapy. However, it is often avoided in elderly populations due to multiple co-morbidities. This often results in chronic ulceration and impaired quality of life.

We report our experience of varicose vein radiofrequency ablation (RFA) under local anaesthesia (LA) in an octogenarian population.

**Method:** All patients aged ≥80 undergoing endovenous RFA between 2009 and 2011 were identified from a prospective database. Patient demographics, co-morbidities, indications for surgery, mode of anaesthesia, complications and outcomes at follow up were documented.

**Results:** 35 patients (Median age 84.5, M:F=1:1.33) had endovenous RFA, with an ASA grade 2 (57%, n=20) and 3 (43%, n=15). 12 patients had active ulcers and 7 had ulcers previously. The majority of operations (69%, n=24) were performed under LA (1 Spinal, 10 GA). There was no operative mortality or morbidity. All 12 ulcers were healed by the end of the follow up period (Median 31 days. Range 8-220). Only 5 patients had oedema and 1 had residual varicosities post-treatment. No ulcer recurrence was identified.

**Conclusions:** Endovenous RFA under local anaesthesia is safe, effective and recommended in patients aged over 80 in units with suitable endovenous expertise.

**0814: PEAK OXYGEN CONSUMPTION IS AN INDEPENDENT PREDICTOR OF MORTALITY FOLLOWING ABDOMINAL AORTIC ANEURYSM SURGERY**

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**Aims:** We examined whether peak oxygen consumption (VO2peak) was an independent predictor of long-term outcome after abdominal aortic aneurysm (AAA) repair.

**Methods:** Between 02/2007 and 09/2009, 115 patients (mean age 74±6 years) underwent static echocardiography and cardiopulmonary exercise testing before AAA surgery. Lee scores were calculated for each patient. Mortality data were determined from our database; median follow-up was 932 days. Using Cox-regression analysis the associations between VO2peak, anaerobic threshold (AT) and all-cause mortality were examined.

**Results:** 59 open and 56 endovascular AAA repairs were performed. 30-day mortality was 3.5% and 12-month mortality was 11.3%. 25 patients had died by 05/2011 giving a long-term series mortality of 21.7%.

The unadjusted hazard ratio (HR) for all-cause mortality was 0.89 (95% confidence intervals(CI) 0.82-0.97) for every ml/kg/min reduction of VO2peak (p=0.008). This remained significant when adjusted for age, sex, Lee score and performance on static echocardiogram (HR 0.90 (CI 0.82-0.99), p=0.033).

The association between AT and mortality was not statistically significant (HR 0.91 (CI 0.80-1.04), p=0.187). The association between left ventricular function and mortality was not statistically significant (HR 2.1 (CI 0.91-4.71), p= 0.080).

**Conclusion:** VO2peak is an independent predictor of all-cause mortality following AAA repair. A dynamic exercise test to volitional exhaustion adds value in risk stratification prior to AAA surgery.

**0828: PREVALENCE OF AAA IN NORTH CENTRAL LONDON – FIRST YEAR RESULTS**

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**Aim:** The National Health Service Abdominal Aorta Aneurysm Screening Programme (NAAAASP) was announced in January 2008. North Central London was approved in the first phase of AAA screening implementation and commenced screening in September 2010.

**Method:** Men aged 65 years resident in North Central London were invited for aneurysm screening. Data collected from 01 December 2010 for 12 months are reported.

**Results:** 11785 men were invited, this included first and numerous recall invitations; 4496 (38%) attended while 1620 (13%) declined to be screened and 5082 (43%) did not attend.

Forty (0.9%) aneurysms were detected: with one man requiring surgery; this was performed endovascularly and is alive 4 months postoperatively.

**Conclusion:** In North Central London the prevalence of screened AAA (0.9%) is far lower than the rate in the MASS trial (4.9%). Possible reasons for this are the younger age screened as compared to those recruited to the MASS trial. The high DNA rates may hide the true prevalence of aneurysms. It is noted, however that nationally the prevalence of AAA remains low.

Further work is needed to improve attendance rates for aneurysm screening in London and this may well provide a more accurate AAA prevalence rate.

**0849: ENDOVENOUS LASER ABLATION FOR SMALL SAPHENOUS VARICOSE VEINS: EVALUATION OF OUTCOMES OVER TWO YEAR FOLLOW-UP**

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**Aim:** To evaluate the safety and efficacy of endovenous laser ablation (EVLA) as an alternative to conventional surgery for small saphenous vein (SSV) incompetence.

**Methods:** Patients with symptomatic, unilateral, primary saphenopopliteal junction (SPJ) incompetence with SSV reflux receiving EVLA(810 nm diode laser) treatment were included. Patients were assessed at baseline and at 1,6,12,52 & 104 weeks. Outcome measures included: Venous Clinical Severity Score (VCSS); Quality of life (generic-SF36, EQSD and disease specific-AVQ) measures; complications and recurrence rates.

**Results:** 62 patients(37 women), mean age 46.3(s.d. 13.3) years were assessed. Initial technical success was 100% in all limbs. SPJ incompetence was abolished in 83% & 89%; and treated SSV occluded in 83 % & 84% at 1 and 2 years respectively. Clinical recurrence over same period was 11% with AVQ measure consistent SPJ developing recanalisation [median (i.q.r.) laser density 94(90-103)]cm]. Venous severity (CEAP and VCSS), AVQ, SF36, EQSD