on the endovascular database at 1, 3, and 12 months and annually thereafter. Changes in these measurements were calculated for each group.

**Results:** Palmaz stent-graft was used during 22 elective and 19 emergency EVARs (17 elective and 10 emergency patients were included for analysis). Throughout follow-up, the suprarenal diameter became greater in the elective group (4.65±5.51mm vs. 2.2±4.13mm;p=0.30) as were the top neck (5.06±5.24mm vs. 4.6±6.02mm;p=0.76) and bottom neck diameters (5.94±6.53 vs. 3.11±4.26mm;p=0.34). Aortic sac regression was higher in emergency patients at 12 months (3.71±2.03mm vs. 3.79±7.02mm;p=0.82) and at 24 months (13.1±13.29mm vs. 4.36±9.61mm;p=0.23). Open re-intervention occurred in 20% of emergency patients for proximal type 1 endoleaks, with another 20% for stent-graft migrations. Re-intervention in elective patients (18%) was for persistent type 2 endoleaks.

**Conclusions:** The complication rates, particularly in emergencies show that Palmaz stenting provides only a short-term solution in EVAR. This should influence patient selection as secondary procedures are more likely.

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**0603: PERSISTENT SCIATIC ARTERY ANEURYSM: A PLEA FOR ATTENTION AND PROPOSAL FOR MANAGEMENT**

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**Aim:** This article reviewed published evidence on the identification and management of persistent sciatic artery aneurysms.

**Methods:** Systematic literature review was undertaken using Medline, EMBASE and Cochrane Database of Systematic Reviews up to December 31st 2012. A free text search using “persistent sciatic artery”, “persistent sciatic artery aneurysm”, “complete PSA” and “incomplete PSA” was performed. All papers identified were screened and the search was enhanced with manual bibliography review.

**Results:** 49 relevant studies were identified. PSA has an incidence of 0.025%-0.04%. PSA aneurysms, though usually asymptomatic, may present with a gluteal mass or distal embolization and ischaemia. Investigation is most commonly performed by angiography, although non-invasive methods show surgical planning advantages. Management is guided by anatomical determination of the complete or incomplete forms. For the complete forms, where the PSA supplies distal limb blood supply, this entails exclusion of the aneurysm and vascular reconstruction with open or endovascular techniques. Incomplete forms, where the PSA is present with intact normal circulation, normally require simple aneurysm exclusion only.

**Conclusion:** Vascular specialists should be aware of this rare, often asymptomatic vascular anomaly as it can complicate common vascular emergencies. Timely surgical or endovascular interventions are vital due to the high risk of aneurysmal dilatation.

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**0630: ASSESSING THE QUALITY OF ONLINE INFORMATION FOR PATIENTS WITH CAROTID DISEASE**

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**Aim:** Controversy exists relating to carotid endarterectomy (CEA) versus carotid artery stenting (CAS). We aimed to assess the quality of online information relating to both.

**Methods:** The Google search engine was searched for “carotid endarterectomy” and “carotid stenting”. The first 50 webpages returned were assessed. The Gunning Fog Index (GFI) and Flesch Reading Ease Score (FRES) were calculated to assess readability. The LIDA tool (Minervation Ltd., Oxford, UK) was used to assess accessibility, usability and reliability.

**Results:** Regarding CEA, 20% (n=10) of the webpages returned were from peer reviewed sources with 34% (n=17) posted by hospitals or health services. Comparatively, for CAS, 40% (n=20) were peer reviewed with 16% (n=8) posted by hospitals or health services. Regarding CEA, the GFI and FRES indicated poor readability at 14.84 and 42.38 respectively. For CAS web page assessment suggested further reduced readability with a GFI of 15.91 and FRES score of 36.01. The LIDA score demonstrated that reliability and accessibility of information was greater than usability for online users.

**Conclusion:** Websites providing information on carotid disease management must be made more readable, reliable and usable. Online information currently available to patients regarding CAS is significantly more difficult to read and comprehend than CEA.

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**0653: REVIEW OF POST-OPERATIVE ANTICOAGULATION IN THE SURGICAL MANAGEMENT OF ARTERIAL EMBOLIC DISEASE**

Martha Nixon, Marcos Kostalas, Keith Gomes-Pinto, John Taylor, David Williams, Northern Devon Healthcare NHS Trust, Barnstaple, UK.

**Introduction:** There is no guidance on post-operative anticoagulation after embolectomy. The purpose of this study was to review the use and outcomes of low molecular weight heparin (LMWH) and unfractionated heparin (UFH) following embolectomy.

**Methods:** Retrospective case review of patients undergoing embolectomy from December 2009 - December 2012 was performed.

**Results:** 33 patients were included. 20 femoral, 5 brachial, 4 popliteal, 2 iliac and 2 graft embolectomies were performed. Anticoagulation prior to surgery included heparin (n=16, 48%), clopidogrel (n=4, 12%), or nothing (n=13, 39%). Intra-operatively heparin (n=24, 73%) or nothing (n=9, 27%) was given. Post-operatively LMWH (n=20, 61%), heparin (n=9, 27%), aspirin/clopadogrel (n=3, 9%) or nothing (n=1, 3%) was given. Patients were discharged on warfarin (n=21, 64%), aspirin (n=5, 15%), clopidogrel (n=2, 6%), dexamethasone (n=3, 9%), rivaroxaban (n=1, 3%) or nothing (n=1, 3%). The overall complication rate was 33% (including haematoma, wound infection, amputation, claudication and death), 67% for those on heparin post-operatively compared to 25% on dexamethasone. Mortality was 30% with average time to death of 9 months.

**Conclusion:** This study has shown that cloxane is a suitable and possibly superior alternative to UFH. The authors have been surprised by the mortality in this group of patients.

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**0681: ARE REFERRAL DELAYS CONTRIBUTING TO LIMB LOSS IN DIABETIC PATIENTS?**

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A root cause analysis (RCA) was performed for major amputations (MA) in diabetic patients to identify preventable causes for limb loss. Data was collected retrospectively using HES codes for Diabetes and MA (above knee/through knee/below knee) and analysed using the London Diabetes Network RCA tool for MA.

20 diabetic patients underwent MA between 1st April 2010 and 31st March 2012. Median time from initial onset of symptoms (IOS) to any secondary care review was 12 weeks while median time from IOS to diabetic foot multidisciplinary team (DFMDT) review was 17 weeks. 6 patients (30%) had no DFMDT clinic review before MA. 16 patients (80%) underwent inpatient vascular imaging. Median interval from admission to vascular imaging was 1 day (1-64). 10 patients (50%) underwent revascularisation (Endovascular therapy n=4 / Surgical bypass n=3 / Endovascular Therapy and Surgical Bypass n=3) Median time from IOS to revascularisation was 70 days (2-1080) and median time from hospitalisation to revascularisation was 1 day (1-64). The 30-day post-MA mortality was 15%. Our RCA highlights significant delays in referral to the DFMDT in this cohort with adverse limb salvage outcomes. The need to refer promptly to the DFMDT should be stressed to carers in the community.

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**0781: PATIENT REPORTED OUTCOMES FOLLOWING CRITICAL ISCHAEMIA MANAGEMENT IN THE REGIONAL VASCULAR CENTRE**

Anna Kamocka, Ahmed Twaij, Oneet Sandher, Charlotte Ashton, Jawaharlal Senaratne, Thomas Rix, Kent and Canterbury Hospital, East Kent Hospitals Trust, Canterbury, Kent, UK.

**Aim:** Patient Reported Outcome Measures (PROMs) assess the health gain after surgical intervention. Guided by existing PROMs assessments, we designed a survey to review patient satisfaction following treatment of critical limb ischaemia (CLI) at East Kent Hospitals Trust (EKHT).

**Methods:** All patients who underwent treatment for CLI between November 2010 and May 2011 were invited to fill in an 11-question Patient Satisfaction Survey, either by post or over the phone. Fisher’s test was used for statistical analysis.
0782: TEN YEAR EXPERIENCE OF MANAGING RAAA IN A DGH
Adnan Qureshi, Carolyn Thomas, Sarah Shahzad, Salem Al-Hamali, Mohamed Elshaer. **Kettering General Hospital NHS Foundation Trust, Kettering, UK.**

The relative merits of repairing abdominal aortic aneurysms (AAA) in district hospital have long been debated. This article addresses the issue of outcome of open emergency surgery for RAAA in a local district general Hospital. At least one-half of all AAA repairs in the UK are carried out in district general hospitals.

**Methods:** Retrospective 10 year data from March 2002 to March 2012 was collected using hospital electronic system; emergency repairs of RAAA were analyzed against mortality.

**Results:** Ten Year 166 patients were admitted with diagnosis of RAAA. M:F was 4:1. Average age of 77 years. Average size of the aneurysm was 8.0 cm. 42%(n=71) of the patient had some form of imaging on admission. Out 166 only 104 were operated with Survival rate of 62%(n=63). 36(21%) were not suitable for operation and 26(15%) were shifted to other trusts.

**Conclusion:** Mortality rate of 60-90% in England and Wales been reported due to RAAA. Our data suggest survival rate of 60% which is comparable to any vascular unit. With the reforms of vascular units with dedicated vascular services RAAA mortality should go down further. Future impact of these reforms will be interesting to monitor.

0799: VACUUM ASSISTED CLOSURE THERAPY FOR INFECTED GROIN WOUNDS FOLLOWING VASCULAR SURGERY
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**Aims:** Vacuum assisted closure (VAC) therapy is increasingly used for management of wound infection. We assessed outcomes for infected groin wounds following vascular surgery.

**Methods:** A case series of 10 patients treated with VAC therapy for groin wound infections following vascular surgical procedures performed May 2010– December 2012 in a tertiary vascular unit. VAC therapy was continuous at 125mmHg, unless graft exposure present.

**Results:** Mean patient age was 70.8 years. Infection occurred mean 43.9 (median 12) days post-operatively. Sizlajgi score was 2 in 70%, score 3 in 30%. Graft exposure was present in 20%. Mean VAC treatment length was 22.6 days, with no incidence of bleeding following application. Complete wound healing was achieved in 80%, recorded mean time to healing 95 days. Mean follow-up was 10.6 months; 3 patients remain under follow-up with one in-patient. One patient required femoral artery ligation with subsequent limb loss. There was one late graft explantation with re-do procedure. Of patients who had prosthetic material in the groin, 67% had favourable outcome. No recorded mortality.

**Conclusions:** VAC therapy can be a safe and effective treatment modality for treating post-operative groin wound infection in the presence of arterial reconstruction and grafts. Graft explantation is not mandatory.

0839: THE ANGIOSSME MODEL AS AN EFFECTIVE PARADIGM TO IMPROVE CLINICAL OUTCOMES OF INFRA-POPLITEAL REVASCULARIZATION
Claire Goatman 1, George A. Antoniou 3, Stavros A. Antoniou 3, Ganesh Kahan 1, George S. Georgiadis 4, David Murray 1,
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**Aim:** The angiome concept is based on the selective approach for revascularization of the ischaemic foot, relying on the knowledge of the anatomy of distinct vascular territories (angiosomes). We set out to conduct a systematic literature review and pooled analysis of outcomes of infra-popliteal arterial reconstruction based on the angiome model of perfusion.

**Methods:** PubMed was searched for studies comparing outcomes of direct (DR) and indirect (IR) revascularization of the specific anatomic area where the ischaemic ulcer was located. Identified outcomes were transformed into a dichotomous outcome for specific time periods, and overall effect sizes were calculated using fixed/ random effects models.

**Results:** Seven studies reporting on 1252 limbs (DR, 687; IR, 565) were identified. Wound healing rate was significantly higher in the DR group (odds ratio 2.09, 95% confidence interval 1.51-2.91, p < 0.001). Limb salvage was also improved in the DR group at 6 and 12 months following revascularization. Even though amputation-free survival rates were significantly higher in DR limbs at 12 months, overall survival did not differ between the groups at 6 and 12 months of treatment.

**Conclusion:** The target vessel directly feeding the ischaemic angiome should be considered when planning infra-popliteal revascularization for critical limb ischaemia.

0887: THE ADEQUACY OF ANTI-OAGULATION WITH IV UNFRACTIONATED HEPARIN
Zymrije Syla, Gareth Harrison, Leith Williams. Wirral University Teaching Hospitals NHS Trust, Wirral, UK.

**Aim:** Heparin is commonly prescribed as an IV unfractionated infusion for venous thromboembolism, patients with mechanical cardiac valves and atrial fibrillation. Our aim was to determine the proportion of time that the APTT was within therapeutic range.

**Method:** We retrospectively reviewed all adult patients who had IV heparin infusion over an 11 month period. We recorded the duration, APTT results, admitting speciality and indication.

**Results:** A total of 88 patients were included (52 male) with a median age (range) of 66 years (24 – 93). The median duration (range) of treatment with heparin was 4 days (1 - 15). The APTT was within therapeutic range only 22% of the time, 45% of the time it was sub therapeutic and 33% of the time over therapeutic. There was no significant variation between admission specialties (medicine, general and vascular surgery) or indication.

**Conclusion:** We have demonstrated that patients on unfractionated heparin infusion do not achieve a desirable APTT 78% of the time. This suggests that they carry an additional risk of developing a thromboembolic event, despite attempted antiocoagulation therapy. We recommend that subcutaneous low molecular weight heparin may be safer and more therapeutic and this is the subject of a future study.

0944: MID-TERM FOLLOW UP OF THE FASCIAL CLOSURE TECHNIQUE FOLLOWING EVAR
David Lyons Ewing, G.J. Harrison, D. Thavarajan, J.A. Brennan, S.R. Vallabhaneni, R.G. McWilliams, Robert Fisher. **Royal Liverpool and Broadgreen University Teaching Hospital, Liverpool, UK.**

**Aim:** Fascial closure is a minimally invasive closure technique following endovascular aneurysm repair (EVAR). The target vessel directly feeding the ischaemic angiome should be considered when planning infra-popliteal revascularization for critical limb ischaemia.

**Method:** Patient, operative and follow up data for prospectively identified fascial closure candidates was recorded on an EVAR database. Recognised follow-up protocols included Duplex and/or CT angiography, which imaged the femoral vessels. Primary outcome measures were the presence of a pseudoaneurysm and their secondary intervention. Secondary outcomes were size and resolution.

**Results:** Between Feb 2008 and March 2012 there were 159 attempted facial closures, 144 of which were successful (91%) in 87 patients that underwent EVAR. Eight patients having successful fascial closure