

Methods: A systematic review and meta-analysis was conducted as per the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement.

Results: Twelve cohort studies involving 1512 patients were included. The majority of these were treated endovascularly (1168 patients). DR was associated with improved wound healing (Odds Ratio, OR 0.39, $p < 0.001$) and limb salvage rates (OR 0.20, $p < 0.001$) compared to IR, however this effect was lost on certain sensitivity analyses. DR had no effect on re-intervention rates (OR 0.44, $p = 0.27$) or subsequent mortality (OR 0.83, $p = 0.37$). Overall study quality was low.

Conclusions: DR appears superior in terms of wound healing and limb salvage. There was no evidence that the approach was less safe than IR. Vascular units performing infrapopliteal revascularisation should consider DR whenever feasible.

1148: MISDIAGNOSIS OF RUPTURED ABDOMINAL AORTIC ANEURYSM: SYSTEMATIC REVIEW AND META ANALYSIS

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Introduction: Ruptured abdominal aortic aneurysm (rAAA) is frequently fatal. Unfortunately rAAAs are frequently misdiagnosed, and the clinical relevance of the "classical triad" of shock, abdominal pain and a pulsatile mass is poorly understood. This meta-analysis aimed to quantitatively summarise the incidence of misdiagnosis of rAAA, the commonest presenting features and the commonest incorrect diagnoses.

Methods: A systematic search was performed using EMBASE and MEDLINE databases to identify studies reporting the initial rate of misdiagnosis of patients with rAAA. The literature review conformed to PRISMA statement standards. Random-effects meta-analyses were performed to report the rate of misdiagnosis, presenting features, and commonest differential diagnoses. Nine studies of 1109 patients contributed to pooled analysis.

Results: The pooled incidence of rAAA misdiagnosis was 42% (95% C.I 29–55%). The commonest erroneous differential diagnoses were ureteric colic and myocardial infarction. Abdominal pain, shock and a pulsatile mass were presenting features in 61% (49–72%), 46% (32–61%) and 45% (29–62%) of rAAA respectively.

Conclusions: The rate of misdiagnosis of rAAA remains poor, and has not improved despite advances in hospital imaging and surgery. There is a need for an effective clinical decision tool to enable accurate diagnosis and triage at the scene of the emergency

1152: INFRAINGUINAL ANEURYSMS IN A TERTIARY SETTING: A STUDY OF OUTCOMES

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Introduction: To assess the short- and long-term outcomes of infra inguinal aneurysms in a university hospital.

Methods: Patients were identified from clinical coding lists and analysed retrospectively, between January 2008–May 2012. The data analyzed using SPSS software version 18.

Results: 39 patients (mean age 58.3yr (range 18–98), 27 males) were identified with an infra-inguinal aneurysms (24 pseudoaneurysms (PA), 12 true aneurysms (TA) and 3 mycotic (MA)). Majority of 11/12 (91.6%) TA were popliteal whereas 22/24 (91.6%) of PA located around femoral bifurcation. Of the 24 PA (mean diameter 33.7mm), majority were secondary to Intra-venous Drug Abuse (IVDA) (41.7%), followed by post-interventional procedures (29.2%), post-anastomosis (12.5%), post-orthopaedic joint surgery (12.5%) and penetrating trauma (4%). 22/24 of PA (12-surgical; 4-endovascular stenting; 1-ultrasound-guided thrombin injection; 4-ultrasound-guided compression; 1-embolisation), 8/12 of TA (7-surgical; 1-endovascular stenting) and 3/3 MA (2-surgical; 1-combined surgical + endovascular stenting) required intervention. Overall amputation rate was 10% (4/30). Of these one was primary major amputation (popliteal TA) where as other three were post intervention (1-MA post bypass procedure, 1-PA post vessel ligation, 1-PA secondary to percutaneous intervention presenting with distal embolization requiring vessel ligation). Overall 30-day mortality was 5.1% (n=2).

Conclusions: Infra inguinal aneurysms carry a significant mortality and morbidity (amputation). Early diagnosis and treatment is crucial in both symptomatic and asymptomatic cases.

1192: NATIONAL SURVEY OF VASCULAR CONSENT OF GREAT BRITAIN AND IRELAND

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Introduction: There are currently no explicit guidelines pertaining to surgical consent of vascular patients in Great Britain and Ireland. The objective of this survey was to explore peer practice and collate expert opinion in relation to vascular procedural consent via a prospective anonymous online and postal survey of the Vascular Society of Great Britain and Ireland.

Methods: The survey assesses the "Who, Where, What and When" of consent. 278/630 members responded (44%), the majority being consultant level (84.5%). Senior doctors are favoured in gaining consent.

Results: Patients are most commonly consented on the vascular ward (64.2%) either the day or day before their procedure (64.1%). Complications included for arterial surgery differed from venous surgery with a stronger emphasis on mortality, cerebro-vascular accident, myocardial infarction and pneumonia for arterial interventions. Uniformity amongst respondents regarding the important procedural specific complications for each of open and endovascular abdominal aortic aneurysm repair, carotid, amputation, peripheral arterial and venous surgeries is identified. Post-operative recovery information is reported to be given routinely in only 67.5% of units.

Conclusions: This comprehensive survey identifies areas of both variation and consensus amongst surgeons and units with regards to consent practice. Training in this complex task is at best informal in the vast majority of units.

1196: IS LOWER LIMB SURGICAL REVASCLARISATION DECLINING?

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Introduction: To define: volume, pattern and outcome of surgical revascularization to the lower limb in our service.

Methods: Subjects undergoing lower limb revascularization (2007–2013) were identified. Information regarding patient demographics, procedure and outcomes were collected from patient records retrospectively.

Results: 471 patients were identified; 302 Males, 169 Females, Age 24–93 years (mean 66.7, SD=1.09). Procedures included: aorto-femoral bypass n=107, infra-inguinal bypass n=364 and aortic surgery for aorto-iliac occlusive disease. Vein grafts used in 214 patients, prosthetic grafts n=142 and composite grafts: n=8. Surveillance programme included 186 autologous vein grafts, and identified stenosis in 42 grafts. (Above knee: n=9, below knee: n=21, distal n=12); 33 of these underwent graft angioplasty. For aorto-femoral and infra-inguinal surgery- mean blood loss=1.2L, SD=1.18. Mean operative time: 3.8 hours, SD=1.24. Mortality: 0.6%. For aortic surgery- mean operative time=3.6 hours SD=1.12, mean blood loss: 2 L, SD=1.42. Mortality: 3.7%. The number of revascularisation procedures has increased annually (39 in 2007 to 113 in 2012). The endovascular procedures performed in the same period were n=1577 increasing 5 folds.

Conclusions: Despite advances in endovascular technology and medical therapeutics, surgical revascularization increased almost three-fold in six years.

1296: SURVIVAL FOLLOWING ARTERIOVENOUS FISTULA FORMATION: ARE PRIMARY ARTERIOVENOUS GRAFTS INDICATED IN THE ELDERLY

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Introduction: The application of a "fistula first" policy to all patients requiring vascular access is increasingly being challenged. In a model described by Lok and colleagues, an arteriovenous graft (AVG) is suggested as first line when patient survival is anticipated to be less than two years.

Methods: A database was established to assess all AVFs formed over a 6-month period. Patients were separated into age groups (A=<50, B=50–59, C=60–69, D=70–79 and E=>80 years) and survival analysis performed over 3 years.