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Introduction: Aortic aneurysms represent a significant burden of disease worldwide. Whilst some risk factors for rupture are well established, such as hypertension, smoking and female gender, the impact of season and meteorological variables is less clear. We systematically reviewed the literature in order to conclusively determine whether these variables are associated with aortic aneurysm rupture.

Methods: Review methods were according to the Preferred Reporting Items for Systematic Reviews and Meta-Analysis guidelines. Data was extracted from all identified studies with regard to study design, geographical location, aortic lesion, sample size, and meteorological variables including season, atmospheric pressure, temperature and daylight hours.

Results: 27 studies representing 46,580 patients were investigated. Whilst there is no consensus within the literature, several large studies suggest a statistically significant seasonal variation in the incidence of aortic aneurysm rupture, with winter months broadly conferring a greater degree of risk. There is also some evidence for an association with atmospheric pressure. Associations with temperature and daylight hours, however, remain more controversial.

Conclusions: Meteorological and seasonal variables may affect the haemodynamic stability of aortic aneurysms. This may have implications on the epidemiology of aneurysm rupture, and thus influence the provision of vascular services and timing of surgical intervention.

0803: IS TEMPORAL ARTERY BIOPSY (TAB) ALWAYS NECESSARY IN SUSPECTED GIANT CELL ARTERITIS (GCA)?

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Introduction: In the diagnosis of GCA, an American College of Rheumatology (ACR) criteria score of three or more has very high sensitivity and specificity. Current guidelines recommend early TAB of sufficient length in all cases of suspected GCA, however recent studies suggest that TAB does not change management in the majority of cases. This retrospective audit aimed to investigate the safety of restricting TAB to only those with indeterminate pre-biopsy ACR score.

Methods: We identified 45 consecutive patients undergoing TAB from April 2012 onwards. Notes were analysed for indications for, timing, length and results of TAB, and subsequent patient management.

Results: Of those started immediately on steroids, 8/40 (20%) underwent TAB within one week. 21/45 specimens (48%) were one centimetre or longer. Seven patients (16%) had their management changed following biopsy result; of these, 2/17 (11.7%) had pre-biopsy ACR score of 2, 4/19 (21%) of 3, and 1/9 (11%) of 4.

Conclusions: In our trust, TAB changes management in patients with pre-biopsy ACR score of 2, 3 or 4. Guidelines for specimen length and timing are poorly adhered to, which may influence interpretation of results. At present, TAB cannot be restricted to those with indeterminate pre-biopsy ACR score.

0830: LENGTH OF THE EXTRACRANIAL INTERNAL CAROTID ARTERY AND DEGREE OF STENOSIS: ARE THEY RELATED?

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Introduction: To determine if the degree of stenosis within the internal carotid artery (ICA) is related to the length of the extracranial ICA.

Methods: Retrospective analysis of patients that underwent carotid endarterectomy between September 2009 and August 2013, in one institution, was carried out. Magnetic resonance angiography time-of-flight images were reviewed and the distance between the carotid bifurcation and the base of the skull was recorded bilaterally. The degree of internal carotid artery stenosis measured on preoperative carotid artery duplex scanning, according to the North American Symptomatic Carotid Endarterectomy Trial (NASCET) criteria, was also recorded. The results were analysed using Pearson's product-moment correlation.

Results: A total of 369 patients underwent carotid endarterectomy within the study period. 175 patients were excluded due to insufficient imaging. 194 patients were included (mean age \pm SEM = 73 \pm 1 year; 125 male, 69

female) and their images and carotid duplex scan results were reviewed. 361 pairs of data were analysed using Pearson's correlation ($r=0.06$, $p=0.23$).

Conclusions: We showed no significant correlation between the length of the extracranial ICA and the degree of stenosis that may develop within it. **0832: MORTALITY FOLLOWING ACUTE NATIVE ARTERY EMBOLECTOMY FOR ARTERIAL EMBOLISM UNRELATED TO PERIPHERAL ARTERIAL DISEASE (PAD): 18 YEAR REVIEW**

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Introduction: Arterial embolism unrelated to peripheral vascular disease (AEUPAD) is known to be associated with risk factors such as malignancy, atrial fibrillation and thrombophilias. This study aimed to determine survival following embolectomy of native arteries for AEUPAD.

Methodology: Retrospective analysis was performed of a prospectively maintained database in a single vascular centre for the past 18 years, for all native artery embolectomies. Patients with PAD and graft embolectomies were excluded. Kaplan-Meier survival analysis was performed to calculate overall survival. Relationship between death and known risk factors were also assessed.

Results: From 1994 to 2012, 192 patients had 204 native artery embolectomies for AEUPAD. 11 had multiple embolectomies. 100(49%) were male, mean age 72.5 (range: 9-102) years. Embolectomies performed; femoral 115 (56%), popliteal 47(23%), brachial 40 (17%), iliofemoral 1(0.4 %) and tibial 2(0.8%). 80 (41.60%) of patients were alive at the time of analysis. Kaplan-Meier estimates 69.77% survival 12 months post embolectomy, decreased to 46.42% and 18.61% within 2 and 5 years respectively. Age ($p<0.0001$) and male sex ($p=0.0451$) were associated with death. Smoking had a negative correlation with mortality ($p=0.0080$).

Conclusions: There is high mortality following embolectomy. Though basic investigations are performed, further assessment may be necessary to prevent high mortality.

0875: EXPLORING THE USE OF ENDOVASCULAR REPAIR IN THE TREATMENT OF RUPTURED ABDOMINAL AORTIC ANEURYSMS IN A DISTRICT GENERAL HOSPITAL

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Introduction: The use of Endovascular Aneurysm Repair (EVAR) for the emergency repair of an abdominal aortic aneurysm (AAA) is debated. Previous studies show a reduction in perioperative morbidity and mortality over the traditional open procedure. This study identifies patients presenting with a ruptured AAA over a two year period that may have been amenable to emergency EVAR.

Methods: 34 patients presented with ruptured AAA during April 2011-April 2013. The patient CT images were assessed for EVAR suitability using the Gore Excluder® for AAA endoprosthesis criteria.

Results: 30 case notes were available, 20 patients clinically stable enough for CT, 12 patients male and the average age was 75 years. The average aneurysm neck diameter was 26.0mm (range 20.0-30.9mm), average neck length 33.7mm (range 15-60mm), and average angle 34° (range 14.0-91.0°). The average diameter of the AAA 75.18mm (range 57.0-106.0mm). The average length of the left sealing zone was 47.3mm (range 27.9-76.5mm) and the right 47.8mm (range 26-78mm). The average diameter of the left common iliac artery was 15.8mm (range 11.1-22.7mm) and the right 16.7m (range 7.3mm-26.4mm). 12 patients that had a CT would have been amenable to EVAR.

Conclusions: 60% of ruptured AAA's that presented to our hospital would have been amenable to emergency EVAR.

0910: ENDOSCOPIC VEIN HARVESTING (EVH) IN LOWER EXTREMITY ARTERIAL BYPASS (LEAB): A SYSTEMATIC REVIEW

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Introduction: Although EVH is associated with lower wound complication rates than open vein harvesting (OVH) for arterial bypass surgery, other long term outcomes remain controversial, and there are concerns that graft patency may be poorer after EVH than OVH. A literature search of Medline, Embase, Ovid and Cochrane databases between 1996 – 2013 was performed using terms 'endoscopic vein harvesting', 'minimally invasive vein harvest', 'peripheral bypass surgery' and 'lower extremity bypass surgery'.