

precipitation (mm) and wind velocity (m/s). Readings from these meteorological conditions were obtained for the day of the event, the previous day, and mean results for 3 days, 1 week and 1 month prior to the event. The moon phase for every day and seasonality were also determined. 75 controls per case were randomly selected in a one-year period before and after every event, in the same meteorological station, for every rupture, and compared. Comparisons of all these variables between ruptures and controls were performed.

Results: A total of 717 with rAAA were identified, and 53775 controls were randomly selected. There were significant low temperatures, low solar global irradiation and higher mean humidity levels in all analyzed time periods (from the same day to one month before) when rAAA occurred ($P < 0.001$, < 0.001 and < 0.05 , respectively). Variability of atmospheric pressure 7 days and 1 month before the event also showed an increment on AAA rupture risk ($P=0.01$ and $P=0.005$). According to seasonality, the majority of rAAAs occurred during fall and winter (56.9%, $P < 0.001$). All the prognostic variables were more frequent in fall-winter, but logistic regression did not identify a clear independent prognostic factor. In regard to lunar phases, the frequency of AAA rupture was significantly higher during the waning moon period (27.9%) versus the other periods ($P=0.035$).

Conclusion: This study shows that the incidence of rAAA is higher during fall and winter. Meteorological factors such as temperature, global solar irradiation, humidity and variability of atmospheric pressure on previous days (up to one month before rupture), increase the risk of AAA rupture. Finally, we observed that rAAAs occur more frequently on periods of waning moon, although the pathophysiologic mechanisms are still unknown.

Disclosure: Nothing to disclose

P-146 Outcomes After Fenestrated and Branched Endografts for Juxtarenal, Pararenal, and Thoraco-abdominal Aortic Aneurysm Repair: 1-year Follow-up

Thoraco-abdominal Aortic Disease

Teresa Solanich, Antoni Giménez-Gaibar, G. Castro, E. González, A. Martínez, M. Camats, C. Herranz

Parc Taulí Hospital Universitari, Servei d'Angiologia i Cirurgia Vascolar, Sabadell, Spain

Introduction: The aim of this study was to evaluate the 1-year follow-up results of fenestrated (FEVAR) and branched (BEVAR) endovascular aortic repair in terms of mortality, target visceral vessel patency, endoleaks, and reintervention rates.

Methods: All consecutive patients treated with FEVAR or BEVAR in a single center were included in a prospectively maintained database. Analyses of outcomes included technical success, operative mortality and late events with regard to target vessel stent patency, reintervention,

endoleak, and mortality during follow-up. Survival, target vessel stent patency, and reinterventions during follow up were subjected to Kaplan-Meier analysis.

Results: A total of 38 patients were treated for juxta/pararenal abdominal aortic aneurysm ($n=23$), thoraco-abdominal aneurysm ($n=12$) or type I endoleak ($n=3$). 24 FEVAR (22 Terumo Aortic Fenestrated Anaconda endografts, 2 JOTEC E-xtra Design Engineering) and 15 BEVAR (inner or outer branched JOTEC E-xtra Design Engineering) procedures were performed from 2013 to December 2018. 97.4% of patients were male, mean age was 72.3 (± 7.3) years and mean aortic diameter was 69.4 (± 16.6) mm. 6 patients had previously undergone at least one open/endovascular aortic procedure. Technical success (stent graft implantation with patent stented target vessels and no Type I/III endoleak) was 97.4%. Revascularization was successful in 129 of 131 target vessels (97.7%). In two patients catheterization/stenting of one renal artery was not possible. Survival at 30 days was 86.8%. 4 patients died within 30 days. Mean follow-up was 15.1 (± 17.2) months. Survival at 1 year was 67.5%. During follow up, 10 patients died, one of them aneurysm-related. Freedom from endoleak at 1 year was 70.7%; 5 type I endoleaks treated and 2 type II endoleaks in follow-up. Freedom from reintervention at 1 year was 67.5%; 5 type 1 endoleaks (2 type Ia, 3 type Ib), 1 dissection, 3 access vessel complications (1 external iliac thrombosis, 2 common femoral artery stenosis/thrombosis). Freedom from target vessel thrombosis at 1 year was 93.1%.

Conclusion: Total endovascular repair in juxta/pararenal abdominal aortic aneurysm and thoracoabdominal aneurysms has favorable midterm results. Most of the reinterventions were performed on renal arteries endoleaks or on vessel access complications.

Disclosure: Nothing to disclose

P-147 Outcomes of Infrainguinal Bypass Procedures in Diabetic Patients with Ischaemic Foot Ulcers: A Sri Lankan Experience in Limb Salvage

Peripheral Arterial Disease

Buddhima Jayawickrama, Vinojan Satchithanatham, Indika Wijesinghe, Hyrin Arc, Rezni Cassim, Mandika Wijeratne

National Hospital of Sri Lanka, University Vascular Unit, Colombo, Sri Lanka

Introduction: One in twelve adults in Sri Lanka suffers from diabetes mellitus. Lower extremity threatened limb ischaemia is a frequent complication among the diabetic population. Here we assessed the outcomes of infrainguinal bypass surgeries in patients with ischaemic diabetic foot ulcers (DFU) in a tertiary care centre.

Methods: Retrospective analysis of infrainguinal arterial bypasses for DFU from January 2015 to December 2017 at a single vascular unit at National Hospital Sri Lanka was performed. DFUs were classified according to Society of Vascular

Surgery Lower Extremity Threatened Limb Classification System (WIFI). Amputation free survival (AFS) using Kaplan-Meier plot was the primary end point in the outcome analysis. The association between age, gender, smoking and type of bypass to the primary end point was analyzed.

Results: Total of 300 bypasses were performed and 255 (85%) had DFUs. Mean follow up was 18.4 months. AFS was 91.4%, 62.9% and 57.4% in one month, 12 and 24 months respectively in diabetic patients and did not differ significantly from the non diabetics. There was a statistically significant increase in overall survival (p= 0.045) in diabetics with a hazard ratio of 1.778 in non-diabetics after Cox regression analysis. Among the bypasses 119 (46%) were femoro-popliteal and 136 (54%) were pop- distal. AFS in pop distal bypasses was 67% and 62.2% in one and two years respectively while it was 58.3% in fem-pop bypasses in one year and 51.9% in two years. The values did not show any statistical significance and did not significantly differ from the non-diabetics. Median wound healing time was 3 months. Age, gender and smoking did not have a statistically significant effect on primary outcome.

Conclusion: Lower limb arterial bypasses offer means of successful limb salvage and wound healing in diabetic patients with ischaemic foot ulcers. Further assessment, analysis and follow up are required on factors pertaining to wound care.

Disclosure: Nothing to disclose

P-148 Limb Salvage in Lower Extremity Arterial Disease: Experience from A Tertiary Centre

Peripheral Arterial Disease

Vinojan Satchithanatham, Buddhima Jayawickrama, Hyrin Arc Gnanaretnam, Gayan Bandara, Amila Weeraseskara, Rezni Cassim, Mandhika Wijerathne
National Hospital of Sri Lanka, Vascular Surgery, Colombo, Sri Lanka

Introduction: Lower extremity arterial disease (LEAD) is an emerging problem in Sri Lanka, though our data on prevalence of LEAD is scarce. Majority of our patients are detected in late stages of severe ischemia and ulceration. Limb salvage in these patients are extremely difficult considering their comorbidities and extend of tissue loss. We present our experience on limb salvage in these patients.

Methods: A prospective study was conducted on all patients who underwent infra-inguinal lower extremity arterial bypass surgery during the period of January 2015 to December 2017 at professorial surgical unit National Hospital of Sri Lanka. Patients were followed up in wound clinics and by telephone based inquiries. Overall survival and amputation free survival was calculated using Kaplan Meier method.

Results: A total of 295 patients underwent lower extremity arterial bypass surgery during this period. Majority (64.4%) of study population were male with a mean age of 65.04 years. Risk factors identified were Diabetes mellitus

(84.4%), Hypertension (35.6%), Ischemic heart disease (13.5%) chronic kidney disease (7.5%) and smoking (26.1%). Out of this 137(46.4%) patients underwent femoral popliteal bypass, 145(49.1%) underwent popliteal distal bypass and 13(4.4%) underwent femoral distal bypass.

Overall survival at 30 days was 94.6% and at 1 year was 82.3%. The amputation free survival at one year was 62%. Although patients after femoral popliteal bypass survive better than popliteal distal bypass, this was not significant (p=0.375)

Conclusion: Although outcomes following peripheral arterial bypass surgery in our unit is satisfactory, we have to improve our figures. To achieve this we should improve our health system to refer ischemic diabetic foot ulcers early to a vascular unit where revascularization can be performed. In addition we should establish peripheral wound care centers to look after the post bypass patients who loose follow up from tertiary centers mainly because of long travelling distance to reach those centers.

Disclosure: It was presented in the annual meeting of the college of surgeons Sri Lanka in 2018

P-149 Feasibility and Clinical Outcome Of REBOA in Patients With Impending Traumatic Cardiac Arrest

Vascular Trauma

David McGreevy¹, F. Abu-Zidan², M. Sadeghi¹, A. Pirouzram¹, A. Toivola¹, P. Skoog³, K. Idoguchi⁴, Y. Kon⁵, T. Ishida⁶, Y. Matsumura^{7,8}, J. Matsumoto⁹, V. Reva¹⁰, M. Maszkowski¹¹, A. Berszstel¹¹, E. Caragounis¹², M. Falkenberg¹³, L. Handolin¹⁴, G. Oosthuizen¹⁵, E. Szarka¹⁶, V. Manchev¹⁶, T. Wannatooop¹⁷, S. Chang¹⁸, B. Kessel¹⁹, D. Hebron¹⁹, G. Shaked²⁰, M. Bala²¹, F. Coccolini²², L. Ansaloni²², E. Dogan¹, J. Manning²³, P. Hibert-Carius²⁴, T. Larzon¹, K. Nilsson¹, T. Hörer¹

¹ Örebro University Hospital, Dept. of Cardiothoracic and Vascular Surgery, Örebro, Sweden

² College of Medicine and Health Science, UAE University, Department of Surgery, Al-Ain, United Arab Emirates

³ Unit of Vascular Surgery, Sahlgrenska University Hospital, Department of Hybrid and Interventional Surgery, Gothenburg, Sweden

⁴ Rinku General Medical Center, Senshu Trauma and Critical Care Center, Izumisano, Japan

⁵ Hachinohe City Hospital, Emergency and Critical Care Center, Hachinohe, Japan

⁶ Ohta Nishinouchi Hospital, Emergency and Critical Care Center, Koriyama, Japan

⁷ Chiba University Graduate School of Medicine, Department of Emergency and Critical Care Medicine, Chiba, Japan

⁸ University of Maryland, R Adams Cowley Shock Trauma Center, Baltimore, United States

⁹ St Marianna University School of Medicine, Department of Emergency and Critical Care Medicine, Kawasaki, Japan

¹⁰ Kirov Military Medical Academy, Department of War Surgery, Saint Petersburg, Russian Federation

¹¹ Västmanlands Hospital Västerås, Department of Vascular Surgery, Västerås, Sweden

¹² University of Gothenburg and Sahlgrenska University Hospital, Department of Surgery, Institute of Clinical Sciences, Sahlgrenska Academy, Gothenburg, Sweden

¹³ Sahlgrenska University Hospital, Department of Radiology, Gothenburg, Sweden