with CIA (p < 0.001), CFA (p < 0.001) and SFA (p < 0.001) diameters.

**Conclusion:** A high prevalence of PA among subjects with screening detected AAA and SAA was found. The presence of PA was not correlated to the aortic diameter in this cohort, where all had dilated aortas, while a strong correlation to the maximum iliac artery diameter was identified. There is a need for a consensus definition of PA, and follow-up studies to see how this correlates to future growth and future need of surgery, since most of the identified PAs were small.

**Disclosure:** Nothing to disclose

---

**O-036 The Neutrophil-to-Lymphocyte Ratio is a Prognostic Biomarker of Amputation and Mortality Among Patients Suffering an Acute Limb Ischemia Event**

**Peripheral Arterial Disease**

Carlos Ruiz Carmona, Alina Velescu, Andrés Galarza Tapia, Eduard Casajuana Urgell, Lidia Marcos García, Meritxell Mellado Joan, Carles Díaz Duran, Albert Clarà Velasco

Parc de Salut Mar — Hospital del Mar, Barcelona, Spain

**Introduction:** The neutrophil-to-lymphocyte ratio (NLR) is a novel simple biomarker of inflammation. It has emerged as a predictor of poor prognosis in cancer and cardiovascular disease, but little is known of its prognostic value in acute limb ischemia (ALI) events. The aim of this study was to evaluate the correlation between the preoperative NLR and the prognosis of patients with an IAE.

**Methods:** Retrospective cohort study of all consecutive patients with an ALI event attended in a tertiary university hospital (referral population 350,000 inhabitants) between 2007 and 2017. ALI secondary to trauma or bypass/stent occlusions were excluded. Analyzed outcomes were major limb amputation and survival. Statistics: Cox regression analysis adjusted by confounding factors.

**Results:** The study group included 265 patients (mean age 78; 49% male) with ALI, of which 172 (64.9%) were attributed to arterial embolism and 93 (35.1%) to an acute arterial thrombosis. Treatment consisted of anticoagulation in 31 (11.7%) patients, revascularization in 226 (85.3%), including 110 (39.8%) with CIA (p < 0.001), 146 (55.1%) with CFA (p < 0.01) and 56 (21.1%) with SFA (p < 0.01). After adjustment for severe limb ischemic neurological impairment, acute arterial thrombosis and treatment delay ≥ 24 hours, the NLR was independently associated with a higher risk of major amputation and survival among patients suffering an ALI event. Therefore it could be considered as an easily available prognostic biomarker.

**Disclosure:** Nothing to disclose

---

**O-037 Multi-vessel Infra-popliteal Flow to the Foot is Associated with Improved Wound Healing in Patients Undergoing Endovascular Treatment for Critical Limb Ischaemia**

**Peripheral Arterial Disease**

Gowthanan Santhirakumaran, Ruwan A. Weerakkody, Talia Lea, Laura Bremner, Lukla Biasi, Athanasios Diamantopoulos, Hany Zayed, Sanjay D. Patel

St Thomas’ Hospital, Department of Vascular Surgery, London, United Kingdom

**Introduction:** Infra-popliteal (IP) angioplasty is often considered the first-line treatment option for patients with critical limb ischaemia (CLI). However disease severity and therefore endovascular practice varies widely, with single vessel infra-popliteal flow being the minimal standard but some evidence favouring multi-vessel flow. We evaluated the effects of both strategies along with foot arch patency on the outcome following endovascular treatment.

**Methods:** We compared outcomes in consecutive patients undergoing IP angioplasty for CLI (Rutherford 4-6) at a single institution. The primary end points were amputation free survival (AFS), limb salvage (LS), and wound healing using Kaplan Meier analysis.

**Results:** Endovascular treatment was completed successfully in 312 patients with tissue loss (mean age 75 years; male 69.2%). Multiple vessel flow (MV) to the foot was achieved in 176 and single vessel (SV) in 136. On completion angiogram, 110 had an occluded foot arch (OA), 146 partial arch (PA) and 56 had a complete arch (CA). AFS was 78% and 57%, and limb salvage was 76% and 67% at 1 and 2 years, respectively. Primary, assisted-primary and secondary patency rates were 69%, 74%, 77% at 1 year and 53%, 57%, 62% at 2 years. OA was associated with significantly delayed healing compared with patients with PA and CA (P = 0.012 log rank test), but with no significant difference in AFS (P = 0.56) or LS (P = 0.63). There was no significant difference between the MV and SV groups when comparing wound healing (P = 0.09), AFS (P = 0.42) or LS (P = 0.67). However analysing patients with occluded arch only (OA, N = 110), MV was associated with significantly improved wound healing when compared with SV (P = 0.02).

**Conclusion:** In patients with an occluded foot arch, multi-vessel infra-popliteal flow is associated with improved wound healing compared to single vessel flow. Patients with