neurological outcome was defined as modified Rankin Scale (mRS) ≤2 within 6 months clinical follow-up.

**Results** Enrolled patients were categorized into two groups: emergent CAS (n=27) or medical treatment (n=18). Reasons for medical treatment were as follows: spontaneous neurological improvement (n=4), technical failure of emergent CAS (n=7) and good collateral circulation (n=7). Good angiographic outcome (mTICI 3 or 2b) was achieved in 25 (92.6%) patients of the emCAS group. Recoeletion (n=3) and hyperperfusion syndrome (n=3, massive intracerebral hemorrhage, cerebral edema and status epilepticus) were identified after emergent CAS. Hemorrhagic transformation was developd in 11 (40.7%) patients of the emergent CAS group and 3 (16.7%) patients of the medical treatment group (p=0.11). The emergent CAS group showed a favorable neurological outcome (51.9% vs 22.2%, p=0.07) and a low rate of recurrent ischemic stroke (p=0.01) compared to the medical treatment group. In multi-variate analysis, no early neurological deterioration before procedure (p=0.04), use of IV t-PA (p=0.03), no intracranial tandem lesion (p=0.02) and emergent CAS (p=0.01) were related with a favorable neurological outcome.

**Conclusions** Emergent CAS for acute ischemic stroke is technically feasible and may give a chance to achieve good neurological outcome. However, physicians should pay attention to the risk of in-stent thrombosis, hemorrhagic transformation and hyperperfusion syndrome.

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**E-098 EFFECT OF ENDOVASCULAR REvascularization ON NeUTROPHIL-Lymphocyte RATIO AND RELATIONSHIP TO 90 DAY OUTCOME**


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**Purpose** Admission Neutrophil-Lymphocyte ratios (NLR) is significantly correlated with 90 days functional outcome in acute ischemic strokes. The aim of our study was to detect post thrombectomy changes in NLR over 1 week with various degrees of revascularization and identify a relationship between NLR changes and 90-day functional outcome.

**Methods** We retrospectively reviewed our prospective stroke database from Nov 2016 to May 2018 for patients who underwent endovascular thrombectomy for anterior circulation large vessel occlusions with an admission NLR (NLR 1) and 72 hours follow-up NLR (NLR 2). We measured stroke severity by NIHSS, degree of recanalization by modified Thrombolysis in Cerebral Infarction (mTICI) score, and clinical outcomes by the modified Rankin Scale (mRS) at 3 months. Univariate analysis was conducted between age, NIHSLR1, NLR2, change in NLR (NLR2-NLR1), NIHSS, mTICI and mRS using correlation coefficient. Change in mean NLR was assessed using Wilcoxon rank sum test. Multivariable logistic regression models were developed to identify effect of NLR 2 on favorable functional outcome (mRS≤2) while controlling for age, NIHSS and IV rtPA utilization.

**Results** 88 patients met our inclusion criteria with a median NIHSS at admission of 18 (4–32), and 90 days mRS of 3 (0–6). An increase in NLR was identified in 75% of patients following endovascular thrombectomy. Mean NLR 2 was significantly higher than NLR 1 (5.5 vs 3.1, p<0.001). There was a significantly negative correlation between TICI and change in NLR (p=0.002), and a significantly positive correlation between change in TICI and 90-day mRS (p=0.034), as well as NLR2 and mRS (p<0.001). No correlation was observed between NLR1 and mRS (p=0.22). High NLR2 was an independent predictor of poor functional outcome (OR=1.34, p=0.002).

**Conclusion** NLR is a readily available biomarker that correlates with degrees of revascularization post-thrombectomy. Improved recanalization and reperfusion is associated with lower follow-up NLR at 72 hours and follow up NLR is an independent predictor of functional outcome.