was evaluated by the treating neurologist and documented in the emergent stroke treatment protocol. Post-admission ps-mRS was retrospectively evaluated based on information registered in the clinical records by treating physicians, case-management nurses and social service workers. Collection of demographic and clinical characteristics and 3-month outcomes. Groups with and without overestimated pre-stroke functional status (defined as an ED ps-mRS < post-admission ps-mRS) were compared.

**Results:** Among a final population of 422 patients (median age 77 years, 50% female patients, median NIHSS 14), concordance of ED ps-mRS and post-admission ps-MRS was found in 64% of patients (Cohen's kappa=0.498, p<0.001). Overestimation of pre-stroke functional status was found in 103 patients (24%). Patients with overestimated pre-stroke functional status were older (p<0.001), more frequently presented diabetes (p=0.003) and less frequently presented 3-month functional independence (p<0.001).

**Conclusions:** Disagreement between ED ps-mRS and post-admission ps-mRS occurs in 1/3 of patients. Overestimation of pre-stroke functional status may induce a mismatch between expected and observed 3-month functional outcomes.

Disclosure of interest: No

# **PROGNOSIS AND OUTCOME AFTER STROKE**

#### 245 I

# Prognostic role of serum ICAM-1 in patients with acute ischemic stroke

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**Background and aims:** Intracellular adhesion molecule-1 (ICAM-1) which is elevated in atherosclerosis and cardiovascular diseases is also an important inflammatory marker in patients with acute ischemic stroke. The aim of the study was to assess the correlation between ICAM-1 and the prognosis of acute ischemic stroke (AIS).

**Methods:** 86 patient were enrolled in this study. Fasting blood of all patients was collected within 24 hours of admission. Serum ICAM-I concentration was measured by the enzyme-linked immunosorbent assay (ELISA). The modified Rankin Score (mRS) was used to determine the clinical outcome 3 months after stroke. According to the outcomes, patients were divided into two groups: patient with good and poor outcomes. The good prognosis was mRS < 3, while poor prognosis was mRS  $\geq$  3.

**Results:** The serum ICAM-1 concentration of patients with poor prognosis were remarkably higher than that of patients with good prognosis. The levels of serum ICAM-1 in patients with AIS in the good prognosis group and the poor prognosis group were (122.4  $\pm$  11.8) and (154.2  $\pm$  12.8) pg/ml, respectively. According to the logistic regression analyses, the serum concentration of ICAM-1 is an independent predictor in patients with AIS (p = 0,007).

**Conclusions:** The serum ICAM-1 concentration in patients with AIS with poor prognosis was remarkably higher than that in the good prognosis patients. The baseline serum ICAM-1 concentration can predict the prognosis of AIS. **Disclosure of interest:** No

#### **PROGNOSIS AND OUTCOME AFTER STROKE**

#### 2563

# Elevated Leukocyte Counts Are Associated With Worse Functional Outcomes in Patients with Large Vessel Occlusion

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<sup>1</sup>University of Cincinnati, Neurology, Cincinnati, United States, <sup>2</sup>Houston Methodist Hospital, Neurology, Houston, United States **Background and aims:** Despite recent advancements in the treatment of acute ischemic stroke with large vessel occlusion (AIS LVO), recovery remains variable, suggesting other factors independent of circulation may influence outcomes. We sought to investigate the time-dependent impact of blood-derived leukocytes on functional outcomes in AIS LVO patients treated with endovascular thrombectomy (EVT).

**Methods:** A multi-center, retrospective analysis was performed on sequential AIS LVO patients presenting May 2016 to May 2019. Complete blood counts (CBC) were evaluated from venous blood collected at three different time frames: <24, 25-48 and 49-72 hours from last know well (LKW). A poor outcome was defined as a modified Rankin Score of  $\geq$ 3 at 90 days. Multivariable logistic regression was performed to evaluate the association between leukocyte counts and outcomes, adjusting for covariates.

**Results:** A total of 355 patients were included [male 51%; median age 68 (58-80)]. After adjusting for age, sex, stroke severity (presenting NIHSS), use of alteplase, percent recanalization with EVT and symptomatic intracranial hemorrhage, an elevated absolute monocyte count within 24 hours of LKW (OR=1.12 95% Cl:1.03-1.23; p=0.01), as well as a greater neutrophil/lymphocyte ratio (OR=1.10 95% Cl:1.03-1.17; p=0.01) post-EVT at 25-48 hours, was found to be associated with a poor outcome.

**Conclusions:** Based on our analytical cohort, a more robust inflammatory response post-stroke may be associated with worse outcomes in patients with LVO. Larger prospective studies are needed to better understand the time-dependent role of leukocyte subtype profiles, as well as identify other biomarkers involved in the inflammatory cascade post-stroke.

Table 1. Odds ratios associated with poor functional outcome at 90 days.

Patient Characteristics	Poor mRS (≥3) OR (95% Cl)	p-value
Age (per year)	1.04 (1.02-1.06)	<0.01
Male	1.14 (0.67-1.93)	0.62
NIHSS (per point)	1.08 (1.04-1.12)	<0.01
Symptomatic ICH	4.89 (2.09-11.46)	<0.01
Received alteplase	0.49 (0.29-0.81)	0.01
mTICI Scale (per point)	0.46 (0.31-0.68)	<0.01

Abbreviations: OR = Odds ratio, CI= Confidence Interval, NIHSS = National Institute of Health Stroke Scale, mTICI =Modified Thrombolysis in Cerebral Infarction Scale, mRS = Modified Rankin Scale

<24 hours		25-48 hours		49-72 hours	
1.12 (1.03-1.23)	0.01	0.99 (0.90-1.09)	0.87	1.06 (0.96-1.16)	0.28
1.02 (0.99-1.05)	0.32	1.10 (1.03-1.17)	0.01	1.04 (0.99-1.09)	0.15
0.88 (0.75-1.03)	0.10	0.84 (0.65-1.07)	0.16	0.87 (0.66-1.14)	0.32
1	1.02 (0.99-1.05) 0.88 (0.75-1.03)	1.02 (0.99-1.05) 0.32   0.88 (0.75-1.03) 0.10	1.02 (0.99-1.05)     0.32     1.10 (1.03-1.17)       0.88 (0.75-1.03)     0.10     0.84 (0.65-1.07)	1.02 (0.99-1.05)     0.32     1.10 (1.03-1.17)     0.01       0.88 (0.75-1.03)     0.10     0.84 (0.65-1.07)     0.16	1.02 (0.99-1.05) 0.32 1.10 (1.03-1.17) 0.01 1.04 (0.99-1.09)

Disclosure of interest: No

# **PROGNOSIS AND OUTCOME AFTER STROKE**

## 2572

# LASSO PREDICTION OF FUTILE RECANALIZATION AND TREATMENT RESPONSE IN PATIENTS WITH ANTERIOR LARGE VESSEL OCCLUSION STROKE RANDOMISED TO MECHANICAL THROMBECTOMY

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