link between cognitive (measured subjectively and objectively) and motor functioning after stroke and whether motor functioning at three months could predict future cognition.
Methods: Subjective cognitive complaints (Checklist for cognitive and emotional consequences following stroke), motor (Berg Balance Scale, 10-meter walk test) and cognitive functioning (information processing-speed, cognitive flexibility, working memory) were evaluated in stroke patients (n=47) at three months, one and two years post stroke. Both cross-sectional and longitudinal data analyses were conducted using Spearman Rank Correlation Coefficients and logistic regression.
Results: Balance at three months post stroke was correlated to measures of information processing speed and cognitive flexibility and these increased over time. Balance was also the strongest predictor of cognitive functioning at one and two years follow up. Gait showed a link with cognitive performance at three months, but this was not strong at follow up.
Conclusions: Balance at three months post stroke should serve as a red flag for both underlying and future problems in information processing speed and cognitive flexibility. Balance should therefore be assessed immediately after stroke. This will predict cognition at three months and later and all these factors should be taken into consideration in the follow up treatments of stroke patients.
Disclosure: No

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SIRTUIN 6 LEVELS ARE INDEPENDENTLY ASSOCIATED WITH POST-STROKE MORTALITY: PILOT DATA FROM THE COSMOS COHORT

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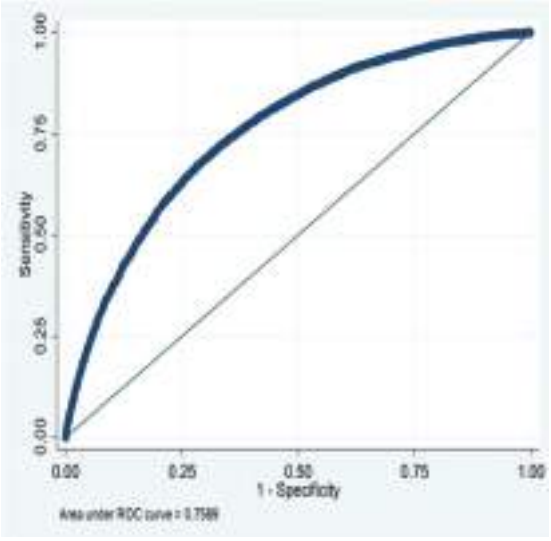
Background and aims: Sirtuin 6 (SIRT6) is a ubiquitous isoform of the Sirtuins family that was recently described as a longevity gene. In a murine model of acute brain ischemia, SIRT6 knockdown was associated with larger cerebral infarct-size, worse neurological outcome, and higher mortality, indicating a possible protective role of SIRT6 in brain ischemia. In this study, we aimed at evaluating the prognostic value of SIRT 6 serum levels in patients with acute ischemic stroke (AIS).
Methods: Serum levels of SIRT6, collected within 72h from symptom-onset, were measured by a commercially available immunoassay in 317 consecutively-enrolled AIS patients from the COSMOS cohort (NCT00390962). The primary endpoint was 90-day mortality. The independent prognostic value of SIRT6 was assessed with multivariate logistic and Cox-proportional hazard-regression.
Results: 35 patients (11%) deceased within 90-day follow-up. After adjustment for established risk-factors (age, NIHSS, heart failure, atrial fibrillation, and C-reactive protein), SIRT6 levels were negatively associated with mortality with an OR of 0.06 (95%-CI 0.003-0.99, p=0.049, per $\log_{10}$ unit increase). The optimal cut-off derived by Youden-index for survival was 624 pg/ml (aproximating the 10th percentile in the cohort). Patients with SIRT6 levels below 624 pg/ml had a higher risk of death with a HR of 5.05 (95%-CI 2.12-12.01, p$<$0.001) in multivariable Cox-regression.
Conclusion: In this pilot study SIRT-6 levels were significantly associated with 90-day mortality after AIS. These results confirm the previous observations in animal models in a well-characterized patient cohort. Further studies are needed to validate the potential value of SIRT6 as a prognostic biomarker.
Disclosure: No

P0484 / 1319

MORTALITY PREDICTION MODEL FOR NON-REPERFUSED ISCHEMIC STROKE AND INTERNAL VALIDATION BY BOOTSTRAPPING

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Background and aims: Non-reperfused ischemic stroke (NRIS) constitutes a high percentage of all admitted strokes; approximately 65 % of ischemic strokes are not candidates for reperfusion measures. Our aim is to identify variables directly associated with an increased risk of mortality on admission for an NRIS from clinical-administrative databases in order to develop a predictive model of mortality in this population with adequate discriminatory capacity. An internal validation will be performed using resampling methodology.
Methods: Source of information: Minimum Basic Data Set (MBDS), period 2013-2015, all hospitalization episodes in Spain due to NRIS. The baseline predictive model was developed using logistic regression, assessing its discriminative power using area under the curve (AUC) and its fit-calibration using non-clustered X2-Pearson test. A second model was then run after resampling the first with 1000-replacements; the performance of both models was compared using the AUC.
Results: Overall, 117,468 NRIS episodes were analyzed. In-hospital mortality rate:6%. The predictive model after bootstrapping detected the following factors associated with mortality risk (Odds Ratio,OR): Age (OR:1.086, 95%CI:1.082-1.090), Sex female (OR:1.206, 95%CI:1.152-1.263), Readmission (OR:1.954, 95%CI:1. 784-2.141), Ischemic heart disease (OR:1.451, 95%CI:1.282-1.642), Hypertension (OR:0.836, 95%CI:0.795-0.879), Atrial fibrillation (OR:1. 193, 95%CI:1.100-1.294), Dyslipidemia(OR:0.688, 95%CI:0.646-0.733) and Heart failure(OR:1.482, 95%CI:1.415-1.552). AUC was 0.759, IC95%:0.753-0.764. Calibration (X2-Pearson=0.401). Baseline and post-bootstrapping models showed no change in AUC (p$<$0.05).
Conclusions: 1). Factors associated with NRIS mortality were detected using a predictive model, with moderate-high discriminative power and internally validated by bootstrapping. 2). This model can be an auxiliary tool in the risk stratification of this patient population.



Disclosure: No