A424 - Can we rely on functional capacity to predict ICU mortality?

JC Garbuglio Araujo da Silva¹; C Coutinho¹; MA Filho²; D Fernandes¹; T Giraldi¹; T Santos¹

¹University of Campinas, School of Medical Sciences, Campinas, Brazil, ²University Medical Center Groningen, University Medical Center Groningen, Holland, Netherlands

Introduction:
The scores traditionally adopted to predict Intensive Care Unit (ICU) mortality do not take into account the functional capacity of patients. On the other hand, there are several scales for this purpose that are used in other clinical situations. This study aimed to evaluate whether the Charlson Comorbidity Index (CCI), Palliative Prognostic Score (PaP), Karnofsky (KPS) and Daily Living Activity Independence Scale (Katz Scale) can predict mortality in acutely ill medical patients.

Methods:
This prospective cohort study was conducted in a Medical Intensive Care Unit of a University Hospital. In six months, 114 patients were included. In addition to the above, the scales used were: Sequential Organ Failure (SOFA), Simplified Acute Physiology Scores III (SAPS III) and Acute Physiology and Chronic Health Evaluation II (APACHE II). Information on functional capacity prior to the acute illness that led to hospitalization was obtained through an interview with family members. The Research Ethics Committee of the University of Campinas approved this study.

Results:
The results of multivariate logistic regression analysis showed that for each point added in PaP, there was a greater chance of 37.8% for mortality (OR: 1.378; CI: 1.108 - 1.714; p = .0124). As expected, the same occurred in APACHE II, where each additional point was related to a 14.6% higher chance of mortality. (OR: 1.146; CI: 1.056-1.242; p <.0001). Regarding the Katz scale, each less point was associated with a 61.8% greater chance of mortality (OR: 1.618; CI: 1.012 - 2.381; p = .0142) (figure 1).

Conclusion:
The PaP and Katz scales seem to be adequate for predicting mortality of critically ill patients admitted to a medical ICU. This finding may help in the elaboration of future ICU mortality scoring systems, as well as in more rational use of resources. However, further multicenter studies are needed to better elucidate these results.