Poster # 41

Title of poster: Does muscle mass predict mortality and return to home in the elderly ICU patient?

Abstract

Introduction: We sought to study whether muscle mass at admission to the intensive care unit (ICU) is predictive of mortality and of discharge destination among elderly critical care patients. Methods: 88 patients 65 years or older admitted to an academic hospital between April 2013 and May 2014 were included in the study. Patients were included if they had a computed tomography scan 2 days prior to or 7 days after admission to the ICU. Specialized software was used to calculate the cross sectional muscle area at the third lumbar vertebrae. This area was then used to calculate muscle index, a normalized measure of overall body muscle mass. APACHE 2 scores were calculated for all patients. Location of living at admission and discharge were also collected, as were data on the amount of physical mobility achieved by the patient during their stay.

Results: Our results are pending final analysis.

Conclusions: If our results support that muscle mass is predictive of mortality and functional status upon discharge, it could be a useful clinical tool to aid prognostication int he elderly ICU patient. Returning home and maintaining independence is a central goal for many elderly ICU patients. Demonstrating a relationship between muscle mass and likelihood to return home may therefore support interventions that aid in rehabilitation and prevention of muscle loss during an ICU stay. These interventions may include early and aggressive physiotherapy while in the ICU.