The Prevalence of Sarcopenia in Korean Hospitalized Elderly

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Abstract:

Background: Sarcopenia is a syndrome characterized by the progressive loss of skeletal muscle mass and muscle strength. Although data exist on the prevalence of sarcopenia of the community-dwelling elderly, there has been no systematic research about hospitalized elderly patients in South Korea, in accordance with the newly developed criteria.

Methods: A cross-sectional study was conducted at the Daejin Medical Center, BundangJesaeng Hospital, South Korea, from May 2013 to March 2015. In this study, the following were checked: the level of hemoglobin, total cholesterol, serum albumin, serum prealbumin, and serum zinc. Furthermore, there was a measurement of the skeletal muscle mass by bioelectrical impedance analysis (BIA). Sarcopenia is defined as the presence of low muscle mass, as assessed by Bioelectrical Impedance Analysis (BIA), according to the European Working Group on Sarcopenia in Older People (EWGSOP).

Results: The hospitalized elderly subjects with a definite diagnosis of sarcopenia were 32 (37%), whereas 54 (63%) had no sarcopenia. The prevalence of sarcopenia of those who were investigated was higher in males than females (males, 68.7% vs. females, 18.5%). In an additional correlation analysis, the score of skeletal muscle index (SMI) is negatively correlated with age and the length of hospital stay; however, it is positively correlated with the BMI, body weight, and serum level of prealbumin.

Conclusions: The prevalence of sarcopenia in hospitalized elderly patients is high. This study showed that sarcopenic subjects were associated with several factors, including age, BMI, serum prealbumin level, and hospital stay. Sarcopenia can be used as a sensitive predictive marker for prognosis of the hospitalized elderly.

Frailty Assessment in Older Atrial Fibrillation Patients

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Abstract:

Background: Atrial fibrillation is a common arrhythmia in the elderly, and the average age of atrial fibrillation patients is rising. Assessing CHADS-VASc score is pivotal to evaluate substantial morbidity and mortality, especially regarding the increased risk of stroke. However, in addition to CHADS-VASc score, the role of frailty assessment in older atrial fibrillation patients is not known.

Methods: We evaluate 369 older atrial fibrillation patients who underwent comprehensive geriatric assessment (CGA) from 2007 to 2014 in a single tertiary care center retrospectively. CHADS-VASc and HAS-BLED scores were calculated based on electronic medical record, and frailty index was computed from CGA. The primary outcome was the 3-year all cause mortality rate.

Results: Patients with higher CHADS-VASc score were more likely to be treated with anticoagulants rather than antiplatelet agents (p < 0.001). However, HAS-BLED score and frailty did not influence patient’s anti-coagulation therapy. During the follow-up period (median [interquartile range], 31.8 [12.9-47.8] months), 154 patients (41.7%) died. Although frailty index was positively associated with CHADS-VASc score (p < 0.001) and HAS-BLED score (p = 0.012), frailty was independent predictor for mortality after adjusting for CHADS-VASc and HAS-BLED scores (hazard ratio, 4.603; 95% CI, 2.91-7.29; p < 0.001).

Conclusions: Frailty assessment along with CHADS-VASc score can provide fine resolution for predicting mortality in older atrial fibrillation patients.