Predictive values of frailty and malnutrition on 6-month all-course death and readmission in gerontal stage B heart failure inpatients

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Abstract

Background: Frailty increase the adverse outcome of clinical heart failure, however, the relation between frailty and stage B heart failure (SBHF) remain unknown.

Methods: Prospective cohort of SBHF inpatients aged 65 years or over who hospitalized between September 2018 and February 2019 and follow up for 6 months. Frailty was assessed by Fried frailty phenotype. Multivariable logistic regression and Cox proportional hazards regression were used to explore the independent risk and prognostic factors.

Results: Data for 443 participants were analyzed. Mean age was 76.1 years (SD=6.79), 165 (49.4%) were male and 109 (24.6%) were frailty. Age (OR 1.68, 95%CI: 1.028-1.110), polypharmacy (OR 1.782, 95%CI: 1.052-3.021), malnutrition (OR 4.083, 95%CI: 1.261-13.223) and cognition impairment (OR 2.386, 95%CI: 1.304-4.364) were independent risk factors of frailty. Frailty was 1.781 (95%CI 1.034-3.098, P=0.041) times more at risk of 6-months death or readmission independent of age, gender, LVEF and NT-proBNP. Malnutrition was an independent predictor of 6-month all-course death or readmission in frail gerontal SBHF inpatients (HR 3.852, 95%CI: 1.585-9.375, P=0.003).

Conclusion: Frailty is common in gerontal SBHF inpatients (GIs-SBHF) and older age, polypharmacy, malnutrition, cognition impairment can increase the risk of frailty. Frailty and nutrition status should be considered among GIs-SBHF to identify the individuals with high risk of death or readmission.

Biography

Zheng has her expertise in evaluation and passion in improving the heart health.Her team and her are working on heart failure, especially the heart failure and frailty. They had build the frailty index based on yellow race, which had been proved to have a better predictive value..