THE ASSOCIATION OF ANEMIA AND FRAILTY IN ELDERS

探討老人貧血與衰弱的相關性

Chao MG[1], Lin CH[1,2], Huang HY, Lin CC[1,2], Liu CS[1], Li TC[3], Lin WY[1]
趙敏君[1]、林志學[1,2]、黃曉音[1]、林正介[1,2]、劉秋松[1]、李采娟[3]、林文元[1]

[1] 中國醫藥大學附設醫院家庭醫學科、
[2] 中國醫藥大學醫學院老化博士學程
[3] 中國醫藥大學生物統計所

Objectives: Because the proportion of elderly people is increasing dramatically in Taiwan, anemia is common in elderly and is an independent predictor for increased mortality. The aim of study was to examine the association of anemia and frailty in elders, and to identify the risk factors of anemia.

Methods: A community-based cross-sectional survey was conducted in Jan, 2009 in Taichung, Taiwan. Nine hundred and seventy-five elders were enrolled in this study. The anemia defined as hemoglobin less than 14g/dL for men and less 12g/dL for women. All elders completed comprehensive geriatric assessment, five components of frailty defined by Fried et al. and a structured questionnaire. Biomarkers such as albumin, hemoglobin, and lipid profiles have been measured. Chi-square test, student's t test and logistic regression were applied to analyze the relationship between associated factors and anemia.

Results: Two hundred and forty-one study elders (24.7%) were defined as anemia. Higher proportion of anemia was found in frail elders than pre-frail and non-frail elders (42.5% vs. 24.7% and 18.5%). Elders who had anemia tended to be older, and with lower BMI and albumin. In logistic regression, significant factors associated with anemia were frail status (odds ratio [OR]: 3.81, 95% confidence interval [CI]: 1.10-18.22) in male, but not significant in female (odds ratio [OR]: 1.11, 95% confidence interval [CI]: 0.07-18.93)

Conclusion: Anemia was associated with frail status. Whether these associations were causal needs to be explored in the future studies in order to make efforts to identify the possible mechanisms in anemia.