Factors Related to the Development of Delirium in Elderly Patients with Respiratory Illnesses and Characteristics of the Pattern of Development of the Delirium

Kazumi FUKUDA

School of Nursing, Faculty of Medicine, Fukuoka University

Abstract: Aim: The purpose of this study was to identify the characteristics and development patterns among delirious patients by analyzing the risk factors related to the onset of delirium, delirium onset day, and duration of delirium in elderly patients with respiratory illnesses. We hoped to use these findings to provide better nursing care, and either prevent or ensure earlier detection of delirium.

Method: The study subjects were patients older than 65 years old who were hospitalized with a respiratory illness. Delirium was assessed by the Delirium Rating Scale (nurse version), and a score of more than 12 points was considered to indicate delirium. The risk factors for delirium were classified in the delirium and non-delirium groups by the Delirium Rating Scale, and the patients' characteristics and condition at the time of hospitalization were compared between the groups. A logistic regression analysis was used to identify the significant variables.

Results: Of the forty-three total participants, 13 (30.2%) became delirious. Age, dementia, and hearing impairment were identified as factors related to the development of delirium. The results of the logistic regression analysis indicated that dementia [odds ratio (OR) 6.95: 95% confidence interval (CI) 1.04-46.59] and respiratory symptoms [OR 9.2: 95% CI 1.39-60.96] were significant factors related to delirium. Although the time from hospitalization to the delirium onset day was not significantly different among the different groups of patients, the incidence and duration of delirium were significantly higher in patients with more severe delirium and higher fevers at the time of the hospitalization.

Conclusions: There are multiple factors associated with the onset of delirium. In elderly respiratory illness patients, it is necessary to assess the potential for delirium via multiple perspectives, including age, dementia and hearing loss. In addition, a high temperature at the time of the hospitalization and the severity of delirium are predictive of the duration of delirium symptoms.

Key words: Elderly patient, Respiratory illness, Development of delirium, Risk factor