

Prevalence of geriatric syndromes in community-dwelling elderly cancer survivors

Rei Ono¹, Daisuke Makiura², Rika Kawaharada¹, Yoshiaki Kido¹, Hisafumi Yasuda¹, Hisatomo Kowa¹

¹Kobe University Graduate School of Health Sciences

²Kobe University Hospital, Division of Rehabilitation

INTRODUCTION: While the number of elderly cancer patients is increasing, cancer survivors also are reaching an advanced age. However, the prevalence of geriatric syndromes in community-dwelling elderly cancer survivors remains unclear.

OBJECTIVES: The aim of this study was to evaluate the prevalence of geriatric syndromes (physical impairment, depression, hyperglycaemia, and kidney dysfunction) in community-dwelling elderly cancer survivors and to determine the relationship between the history of cancer and geriatric syndromes.

METHODS: A cross-sectional study was conducted. We examined 2,283 elderly individuals (≥ 65 years of age; mean age: 72.3 ± 4.6 years; women: 51.6%) who were registered in a Japanese rural area and those who attended special health checkups in 2019. The history of cancer and the year from cancer diagnosis to this survey were interviewed using a questionnaire. Physical impairment was defined as the disability in mobility and/or activities of daily living based on the 25-question Geriatric Locomotive Function Scale. The cutoff score was set at 16 scores or above (Seichi A, 2012). Depression was defined using the Geriatric Depression Scale (≥ 5 scores). Hyperglycaemia was defined as the HA1c level $\geq 6.5\%$. Kidney dysfunction was defined as the eGFR < 45 mL/min/1.73 m². We used multiple logistic regression analysis adjusted for possible confounders, such as sex, age, and body mass index to determine the relationship between history of cancer and geriatric syndromes.

RESULTS and CONCLUSIONS: Two hundred and twenty-four participants (9.8%) had a history of cancer. The prevalence of physical impairment, depression, hyperglycaemia, and kidney dysfunction was 11.5%, 22.1%, 10.1%, and 4.0%, respectively. In multiple logistic regression analysis, the history of cancer was associated with the presence of physical impairment (odds ratio: 1.8; 95% confidence interval: 1.2–2.7) and kidney dysfunction (odds ratio: 2.1; 95% confidence interval: 1.2–3.7). The community-dwelling elderly cancer survivors had a higher prevalence of geriatric syndromes than the elderly individuals without cancer.

Keywords: geriatric syndromes, community-dwelling elderly, survivors