



THE HIGH IMPACT OF PREOPERATIVE SOCIAL FRAILITY ON OVERALL SURVIVAL IN ELDERLY GASTROINTESTINAL CANCER PATIENTS

R. Ono¹, D. Makiura², M. Okumura², A. Fukuta³, T. Saito¹, J. Inoue², M. Yamamoto⁴, T. Nakamura⁴, Y. Kakeji⁴, Y. Sakai⁵

¹Kobe University Graduate School of Health Sciences, Department of Public Health, Japan

²Kobe University Hospital, Division of Rehabilitation, Japan

³Nagoya University Hospital, Division of Rehabilitation, Japan

⁴Kobe University Graduate School of Medicine, Division of Gastrointestinal Surgery, Japan

⁵Kobe University Graduate School of Medicine, Division of Rehabilitation Medicine, Japan

INTRODUCTION: With increasingly older populations in our society, the rate of elderly cancer patients with physical, cognitive and/or social frailty is growing. Although studies on the relationship between physical frailty, sarcopenia, and adverse events during and/or after treatment have been conducted, the impact of social factors on adverse events has remained unclear.

OBJECTIVES: The aim of this study was to investigate the impact of preoperative social frailty on overall survival in elderly gastrointestinal cancer patients.

METHODS: A total of 178 elderly cancer patients who underwent radical surgery at a university hospital from October 2015 to July 2017 (mean age; 72.0 years, male; n=135) participated in this cohort study. The main outcome was overall survival (OS). Participants who met two or more of the following criteria were defined as having social frailty (Makizako H, 2015): going out less frequently, rarely visiting friends, feeling unhelpful to friends or family, living alone, and not talking with someone every day. The Cox proportional hazards model was performed with social frailty as the main explanatory variable; OS as the outcome variable; and age, sex, clinical stage, and sarcopenia (Asian consensus definition) as confounding variables.

RESULTS and CONCLUSIONS: Of the 178 participants, 68 (38.2%) had gastric cancer, 65 (36.5%) had colorectal cancer, 38 (21.3%) had esophageal cancer, and 7 (4.0%) had other forms of cancer. A total of 72 patients were identified as having social frailty before surgery and 22 patients had died (median follow-up; 431.3±151.8 days) before the follow-up. The presence of social frailty was a significant factor relating to OS after adjustment for confounding factors (hazard ratio; 3.32, 95% CI; 1.15 – 9.59). As preoperative social frailty in elderly gastrointestinal cancer patients was found to have a high impact on OS, it should be one of the key assessment factors considered before surgery.

Keywords: Social frailty, overall survival, elderly, gastrointestinal cancer