How Do We Recommend Screening Endoscopy for Gastric Cancer in the Recipients after Transplantation?

Jae Myung Park, Myung-Gyu Choi, Yu Kyung Cho, In-Sik Chung, Chul Woo Yang, Yong Soo Kim

Department of Internal Medicine, The Catholic University of Korea College of Medicine, Seoul, Korea

Background and Aim: Overall risk of malignancy after transplantation has been regarded higher than the general population. Although gastric cancer is the most common malignancy, there has been no guideline on screening posttransplantation recipients in Korea. This study was to compare the frequency of gastric cancer between asymptomatic kidney transplantation (KT) recipients and asymptomatic controls.

Methods: A total of 509 among 820 recipients, who did not have gastrointestinal symptoms, were undergone with upper endoscopy for screening gastric cancer. We compared the frequencies of gastric cancer between these KT recipients and 10,080 asymptomatic healthy subjects. Status of Helicobacter pylori infection was investigated.

Results: The mean age of the KT recipients was 48.11±10.7 years and male comprised 56.8%. The interval between KT and endoscopic examination was 137.0±67.3 months (range, 20~355). In the healthy subjects, the mean age was 49.4±11.5 years and male comprised 58.2%. We identified 15 (2.9%) and 10 (0.1%) cases of adenocarcinoma in the KT recipients and the controls, respectively (p<0.001; odds ratio, 30.58; 95% CI, 13.667~68.407). Differences in the frequency of gastric cancer between controls and KT recipients were significant according to the age (linear-by-linear association, p<0.001). Duration of immune suppression was not significantly associated with development of gastric cancer in the patients (p=0.19). Regression model of the development of gastric cancer revealed that the age of the recipients was a significant factor for the development of gastric cancer. Helicobacter pylori infection was not a significant factor for the gastric cancer in the KT recipients.

Conclusion: Frequency of gastric cancer was higher in the KT recipients than the controls. Age was significantly associated with the development of gastric cancer.