Differences in routine esophagogastroduodenoscopy between Japanese and international facilities: A questionnaire survey

Noriya Uedo,1 Takuji Gotoda,2 Shigetaka Yoshinaga,3 Tokuma Tanuma,4 Yoshinori Morita,5 Hisashi Doyama,6 Akira Aso,7 Toshiaki Hirasawa,8 Tomonori Yano,9 Norihisa Uchita,10 Shiaw-Hooi Ho11 and Ping-Hsin Hsieh12

1Department of Gastrointestinal Oncology, Osaka Medical Center for Cancer and Cardiovascular Disease, Osaka, Japan, 2Division of Gastroenterology and Hepatology, Department of Medicine, Nihon University School of Medicine, Tokyo, Japan, 3Endoscopy Division, National Cancer Center Hospital, Tokyo, Japan, 4Department of Gastroenterology, Teine Keijinkai Hospital, Sapporo, Japan, 5Division of Gastroenterology, Department of Internal Medicine, Kobe University Graduate School of Medicine, Kobe, Japan, 6Department of Gastroenterology, Ishikawa Prefectural Central Hospital, Kanazawa, Japan, 7Department of Medicine and Bioregulatory Science, Graduate School of Medical Sciences, Fukuoka, Japan, 8Division of Gastroenterology, Cancer Institute Hospital, Tokyo, Japan, 9Endoscopy Division, Department of Gastroenterology, National Cancer Center Hospital East, Kashiwa, Japan, 10Department of Gastroenterology, Kochi Red Cross Hospital, Kochi, Japan, 11Department of Medicine, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia, and 12Division of Gastroenterology and Hepatology, Department of Internal Medicine, Chimei Medical Center, Tainan, Taiwan

Background and Aim: The mortality rate of gastric cancer (GC) is close to the incidence rate worldwide. However, in Korea and Japan, the mortality rate of GC is less than half of the incidence rate. We hypothesized that good-quality routine esophagogastroduodenoscopy (EGD) contributes to a high detection rate for early GC (EGC) and improves mortality in these countries.

Methods: To clarify the differences in routine EGD, a questionnaire survey was conducted in 98 Japanese and 53 international institutions.

Results: Prevalence of screening examination among routine EGD was higher in Japanese than in international institutions. Japanese endoscopists noted that endoscopic mucosal atrophy was the most significant risk factor for GC, whereas international endoscopists paid more attention to clinical information such as age, symptoms and family history. Antispasmodics, mucolytics and defoaming agents were used more frequently in Japanese institutions. The examination time was similar (mostly 5–10 min) between Japanese and international institutions. Japanese endoscopists took more pictures (>20 in almost all institutions) than international endoscopists (≤20 in two-thirds of institutions). In Japanese institutions, biopsy specimens were more frequently taken from areas of mucosal discoloration, unevenness or spontaneous bleeding rather than from obvious endoscopic lesions such as ulceration or polyps. In most Japanese institutions, one or two biopsy specimens were taken per lesion, compared with ≥three in international institutions.

Conclusion: There were some discrepancies between Japanese and international institutions for routine EGD. Thus, standardization is required for adequate risk assessment, proper techniques, and knowledge of endoscopic diagnosis of EGC.

Key words: biopsy, early diagnosis, esophagogastroduodenoscopy, gastric cancer, gastrointestinal endoscopy

INTRODUCTION

Although the incidence of gastric cancer (GC) has been declining, it remains the fifth most common type of cancer and the third leading cause of cancer death worldwide. Korea has the highest incidence rate globally, followed by Mongolia and Japan. The global mortality rate of GC is close to the incidence rate (Fig. 1), meaning that most patients with GC die from the disease after diagnosis. However, in Korea and Japan, the mortality rate of GC is less than half of the incidence rate.

Although mortality is high in patients with advanced GC, when GC is diagnosed at an early stage, 5-year survival rate