Definition of Real Esophago-Gastric Junction

Takahiro Sato1,4 and Yo Kato1,4

1Gastroenterological Surgery, Comprehensive Cancer Center, Saitama Medical University International Medical Center 1397-1 Yamane, Hidaka, Saitama, 350-1298, Japan
2Department of Pathology, Tokyo Medical and Dental University, 1-13-3 Toyooka, Iruma, Saitama, 358-0003, Japan
3Gastroenterological Surgery, Harada Hospital, 1-13-3 Toyooka, Iruma, Saitama, 358-0003, Japan
4Department of Pathology, Cancer Institute, Japanese Foundation for Cancer Research, 3-10-6, Ariake, Koto-ku, Tokyo 135-8550, Japan

Abstract

An increase in the incidence of esophageal adenocarcinoma and gastric cardia cancer has been reported in Western countries. However, the lack of universally accepted criteria for the esophago-gastric junction (EGJ) continues to result clinically in confusion in diagnosis of gastric cardia cancer, esophageal adenocarcinoma and Barrett’s esophagus (BE), not only in Japan but also in Western countries. The definition of real EGJ would minimize bias and error and lead to etiologic hypothesis.

Keywords: Palisading longitudinal esophagus vessels; Esophago-gastric junction; Squamo-columnar Junction; Barrett’s epithelium; Gastric cardia cancer

Abbreviations

EGJ: Esophago-Gastric Junction; SCJ: Squamo-Columnar Junction; PLEV: Palisading Longitudinal Esophagus Vessel; H. pylori: Helicobacter pylori; BE: Barrett’s Esophagus; SSBE: Short Segment Barrett’s Esophagus; GERD: Gastro-Esophageal Reflux Disease

The incidence rate of gastric cancer in Japan is one of the highest in developed countries [1]. Infection by Helicobacter pylori (H. pylori) and gastric atrophy have also been associated with the development of gastric cancer [2]. On the other hand, association of H. pylori infection with the risk of stomach cancer is restricted to the noncardia region, while the cardia region shares the same risk factors as the distal part of esophagus, for which an inverse association of H. pylori infection with esophageal adenocarcinoma has been reported [3-6]. An increase in the incidence of esophageal adenocarcinoma and gastric cardia cancer has been reported in Western countries [7,8]. On the other hand, in Japan, where both Barrett’s esophagus (BE) and esophageal adenocarcinoma are far more uncommon than in Western countries, the increase seems to be slight as is that of BE [9]. However, the lack of universally accepted criteria for the esophago-gastric junction (EGJ) continues to result clinically in confusion in diagnosis of Barrett’s esophagus, not only in Japan but also in Western countries. Therefore, it is difficult to know true incidences of gastric cardia cancer, esophageal adenocarcinoma and BE, particularly short segment Barrett’s esophagus (SSBE). In endoscopy, as a marker of the EGJ, more attention has been paid to the proximal margin of gastric folds in Western countries [10], whereas in Japan, use of the most distal ends of the palisading longitudinal esophagus vessels (PLEVs) is more prevalent [11-13].

In authentic textbooks, the positions of squamo-columnar junction (SCJ) and EGJ is coincident in the older textbooks [14-17]. In contrast, SCJ in normal is shifted proximal to the EGJ in the recent textbooks [18,19].

Sharma, et al. emphasized the definition of real EGJ and the association of the length of Barrett’s esophagus with cancer risk [20,21].

To this end, further investigation evaluating the real esophago-gastric junction correctly should be needed. In the same way, the improved quality of data collected by cancer surveillance systems in various countries would minimize bias and error, and thus lead to etiologic hypothesis [22,23].

References


*Corresponding author: Takahiro Sato, Gastroenterological Surgery, Harada Hospital, 1-13-3 Toyooka, Iruma, Saitama, 358-0003, Japan, Tel: +81-4-2962-1251; Fax: +81-4-2962-0965; E-mail: takahiro-aogp@biglobe.jp

Received July 08, 2013; Accepted August 08, 2013; Published August 11, 2013

Citation: Sato T, Kato Y (2013) Definition of Real Esophago-Gastric Junction. J Gastroint Dig Syst 3: 130. doi: 10.4172/2161-069X.1000130

Copyright: © 2013 Sato T, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.


Submit your next manuscript and get advantages of OMICS Group submissions

Unique features:
• User friendly/feasible website-translation of your paper to 50 world's leading languages
• Audio Version of published paper
• Digital articles to share and explore

Special features:
• 250 Open Access Journals
• 20,000 editorial team
• 21 days rapid review process
• Quality and quick editorial, review and publication processing
• Indexing at PubMed (partial), Scopus, EBSCO, Index Copernicus and Google Scholar etc
• Sharing Option: Social Networking Enabled
• Authors, Reviewers and Editors rewarded with online Scientific Credits
• Better discount for your subsequent articles

Submit your manuscript at: http://omicsonline.com/editorialtracking/