

Changing pattern of adenocarcinoma of the esophagogastric junction in recent 10 years: experience at a large tertiary medical center in China

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ABSTRACT

Aims and background. To investigate the changing pattern of adenocarcinoma of the esophagogastric junction subtypes and its time trend relationship with that of reflux esophagitis over 10 years at a tertiary medical center in China.

Methods and study design. The medical records of all patients who underwent gastroscopy from 2000 to 2009 were reviewed. Subtypes of adenocarcinoma of the esophagogastric junction according to Siewert's classification, gastric non-cardiac adenocarcinoma, esophageal squamous cell carcinoma, reflux esophagitis and *Helicobacter pylori* infection were diagnosed according to the results of gastroscopy and mucosal histopathology. All the patients were divided into three cohorts (cohort A [2000-2003], cohort B [2004-2006]), cohort C [2007-2009]), and the proportion of adenocarcinoma of the esophagogastric junction and its subtypes in all upper gastrointestinal tumors (adenocarcinoma of the esophagogastric junction, gastric non-cardiac adenocarcinoma and esophageal squamous cell carcinoma) in each cohort were compared. The annual percentages of adenocarcinoma of the esophagogastric junction, reflux esophagitis and *H pylori* in all patients were also compared.

Results. 70,073 patients (cohort A, n = 20298, cohort B, n = 20443, cohort C, n = 29332) who underwent gastroscopy were reviewed. Totally there were 279 patients with adenocarcinoma of the esophagogastric junction (0.398%, M:F = 5.6:1), 794 gastric non-cardiac adenocarcinoma patients (1.133%, M:F = 2:1), 366 esophageal squamous cell carcinoma patients (0.522%, M:F = 3.4:1) and 4681 reflux esophagitis patients. Among the three subtypes of adenocarcinoma of the esophagogastric junction, only type I adenocarcinoma of the esophagogastric junction in upper GI tumors exhibited increasing trend over time (1.86%, 3.39% and 4.94% for cohort A, B and C, respectively, $P = 0.009$). According to the WHO classification of histological types, the tubular types of adenocarcinoma of the esophagogastric junction have decreased ($P = 0.008$), whereas papillary type ($P = 0.001$) increased. The annual detection rate of type I adenocarcinoma of the esophagogastric junction appeared to be positively correlated with reflux esophagitis ($r = 0.846$, $P = 0.002$) and negatively with *H pylori* infection ($r = -0.785$, $P = 0.007$) in time trend.

Conclusions. Over a recent 10-year period, the three subtypes of adenocarcinoma of the esophagogastric junction showed different changing trends, suggesting heterogeneous characteristics of the three Siewert types of adenocarcinoma of the esophagogastric junction.

Key words: adenocarcinoma of the esophagogastric junction, changing pattern, reflux esophagitis.

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