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CONCISE COMMENTARY

Concise Commentary: It's All Downhill from Here—How Diagnostic and Therapeutic Advances May Decrease the Incidence Rates of Gastroesophageal Junction and Esophageal Adenocarcinoma

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Although the incidence of esophageal adenocarcinoma (EAC) has risen substantially since the 1970s in Western countries, fewer data are available regarding the comparable rates of gastroesophageal junction adenocarcinoma (GEJAC) [1, 2]. In this issue of Digestive Diseases and Sciences, Agarwal et al. [3]. Show that the incidence of both EAC and GEJAC rose after the 1970s and then plateaued after 2004, in a single-center manual review of all EAC and GEJAC cases from 1976 to 2019. For EAC, their findings are supported by Surveillance, Epidemiology, and End Results (SEER) data, that showed an annual increase in EAC from 1973 to 2017 of 767%, plateauing between 2004 and 2017 [2].

Agarwal et al. report that the incidence and 5-year mortality for EAC and GEJAC remain high, despite advances in endoscopic and oncologic therapies of Barrett's. Their data confirm that age and stage at diagnosis are significant predictors of mortality, further stressing the value of early detection. To increase the uptake of early detection of Barrett's, recent guidelines support the use of non-endoscopic tissue sampling and the detection of mucosal biomarkers in patients with chronic reflux and other Barrett's risk factors [4]. The epidemiology of esophageal and GEJ adenocarcinomas takes on increasing relevance as these methods of non-endoscopic Barrett's detection may detect precursor lesions in populations that had not previously been endoscopically screened. As this study shows, there are similar risk factors for GEJAC and EAC, including gastroesophageal reflux disease, male gender, older age, and elevated body mass index. Furthermore, GEJAC and EAC have high rates of associated Barrett's esophagus—over 60% of patients in the present study [3]. Due to their common risk factors, screening efforts and early detection of Barrett's may have an impact on not only EAC but also on GEJAC.

The current plateau in the incidence of GEJAC and EAC, that has occurred despite the current "obesity epidemic," may reflect the combined effects of potent antisecretory drugs, the increased uptake of effective screening programs, and advances in endoscopic therapy. Nevertheless, given the high mortality of these malignancies and survival comorbidities for those who have undergone therapy, efforts should be made to further decrease the incidence of these cancers. Future directions will involve applying new technologies, including education and non-invasive screening to assist in prevention, early detection and access to all at-risk populations, advances in endoscopic diagnosis with the assistance of artificial intelligence to help aid in the detection of premalignant lesions such as Barrett's, advances in endoscopic obliteration of premalignant and small malignant lesions, and advances in the measurement of the quality of endoscopic detection of esophageal premalignant pathology (similar to adenoma detection rate) that may further decrease the incidence of both EAC and GEJAC.

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