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LETTER

The effect of postgastrectomy reflux on lung functions

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Dear editor

We read with interest the report of Saito et al[1] regarding the association between long-term effects of gastrectomy in patients with spirometry-defined chronic obstructive pulmonary disease (COPD) and those at risk of COPD. Notably, the level of paO_2, exercise capacities, and distances in the 6-minute walk test were lower compared with patients who were without a history of gastrectomy. One of our concerns about this well-designed study is lack of the reporting of previous exacerbations of COPD in these patients or controls. It is well known that reflux esophagitis is commonly seen postgastrectomy; thus, this situation may increase exacerbations of COPD. A more frequent rate of exacerbations of COPD may potentially worsen lung functions. Furthermore, there are some recent reports associating gastroesophageal reflux disease-risk with exacerbations of COPD.[2] Although the authors report that none of the subjects experienced exacerbations during the last 3 months before enrollment, previous exacerbations might have caused functional decline and also muscle loss via decline in oral intake during exacerbations and systemic corticosteroid use. Furthermore, questioning of the participants regarding the symptoms of gastroesophageal reflux may provide important information. In conclusion, exacerbations of COPD caused by gastroesophageal reflux disease may influence the main outcomes of this study.

Disclosure

The author reports no conflicts of interest in this communication.

References

1. Saito H, Nomura K, Abe S, et al. Long-term effects of gastrectomy in patients with spirometry-defined COPD and patients at risk of COPD: a case-control study. *Int J Chron Obstruct Pulmon Dis*. 2015;10:2311–2318.
2. Liang B, Wang M, Yi Q, Feng Y. Association of gastroesophageal reflux disease risk with exacerbations of chronic obstructive pulmonary disease. *Dis Esophagus*. 2013;26:557–560.

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Author's reply

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Dear editor

Dr Atay raises an important point that for patients who had undergone gastrectomy, reflux esophagitis, or gastroesophageal reflux disease (GERD) might be a risk factor that caused frequent exacerbations in chronic obstructive pulmonary disease (COPD), subsequently resulting in a worsened lung function in our study.[1] GERD causes frequent exacerbations in some phenotypes of COPD,[2] and GERD or chronic dysmotility is a known complication of gastrectomy. As we anticipated and Dr Atay suspected, the complication of GERD was significantly higher in patients who had undergone gastrectomy: 51/85 and 38/170 in the gastrectomy group and control group, respectively ($P<0.000$). In a subsequent population-based survey in the US, 22% of respondents reported that they had some symptoms of GERD.[3] This finding is similar to the present data. Because GERD is prevalent in healthy subjects as well, the present study was designed with special attention to avoid the effects of intentional bias, as follows. First, we recruited all possible postgastrectomy patients with COPD for a 10-year period; these patients were also free from exacerbations at least for the 3 months preceding enrollment. We used a case–control study to minimize selection bias. Second, accurate diagnosis of GERD was necessary using intraesophageal PH monitoring; if such methods are used, it might be difficult to assess the frequency or severity of GERD over a long period, as shown in this study. Currently, long-term follow-up data regarding the correlation between frequency of COPD exacerbations and impairment of lung function are unavailable; furthermore, no data are available on the episodic frequency of GERD in such patients who have undergone gastrectomy. Third, pylorus-preserving segmental gastrectomy, in which a portion of the stomach is resected but the pylorus is left intact, was originally developed in Japan as a treatment approach for gastric ulcer surgery aiming to improve quality of life and avoid postgastrectomy syndrome. This procedure was widely used in most gastrectomies in Japan after the technique was developed, and most patients received such a procedure.[4] However, Dr Atay's viewpoint is an important issue that warrants further study.

Disclosure

The authors report no conflicts of interest in this communication.

References

1. Saito H, Nomura K, Abe S, et al. Long-term effects of gastrectomy in patients with spirometry-defined COPD and patients at risk of COPD: a case-control study. *Int J COPD*. 2015;10:2311–2318.
2. Hurst JR, Vestbo J, Anzueto A, et al. Susceptibility to exacerbation in chronic obstructive pulmonary disease. *N Engl J Med*. 2010;363:1128–1138.
3. Camilleri M, Dubois D, Coulie B, et al. Prevalence and socioeconomic impact of upper gastrointestinal disorders in the United States: results of the US Upper Gastrointestinal Study. *Clin Gastroenterol Hepatol*. 2005;3:543–552.
4. Katai H. Function-preserving surgery for gastric cancer. *Int J Clin Oncol*. 2006;11:357–366.