Survival benefit of No. 10 lymphadenectomy with spleen preservation

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We read the paper by Xia et al. with interest (1). The authors performed a meta-analysis to evaluate the efficacy of the No. 10 lymphadenectomy (LND) with spleen preservation on patients with gastric cancer and/or esophagogastric junction adenocarcinoma who underwent total gastrectomy. They demonstrated that the No. 10 LND can improve the overall and disease-free survival rates for patients with gastric cancer and/or Siewert type II/III adenocarcinoma of the esophagogastric junction who underwent total gastrectomy. We congratulate the researchers for their contribution for analyzing the survival outcomes of patients with and without No. 10 LND. However, there are some issues raised in this study that deserve attention and comment.

No. 10 LND with spleen preservation is a technically challenging procedure even for experienced surgeons (2). For complete No. 10 LND, many surgeons prefer splenectomy rather than spleen-preserving LND. However, long-term results of JCOG 0110 showed that splenectomy increased operative morbidity without improving survivals in proximal gastric cancer (3). For decreasing postoperative complications and increasing survival, therefore, splenic hilar LND without splenectomy is necessary. Because of the technical difficulties of dissecting soft tissues around splenic vessels, studies on No. 10 LND involving spleen preservation are limited. However, novel techniques have been introduced to facilitate splenic hilar LND. Using methods such as the splenic hilar node dissection after total gastrectomy (SHINY) maneuver (4), Huang’s three-step maneuver (5), or the fluorescent lymphography technique (6), splenic hilar lymph node dissection could be safely performed even through minimally invasive surgery.

Another point to comment on is that all studies included in the analysis of this meta-analysis were conducted in Asia. According to the recently published Japanese gastric cancer treatment guideline (7), No. 10 LND is recommended only for upper gastric cancer invading the greater curvature. Studies on further subgroup analysis according to the location of the tumor are needed. The number of studies analyzed in this meta-analysis was only eight, and even overlapping institutions in the same periods were included. There is no randomized controlled study and no prospective study. Moreover, all studies were conducted in Asian countries. This is a major limitation of the study as a meta-analysis.

Nevertheless, this study is the first meta-analysis to prove the survival benefit of No. 10 LND with spleen preservation compared to the non-No. 10 LND. With advances in surgical skills, more surgeons from diverse institutions are expected to report spleen-preserving splenic hilar LND.

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Accordingly, it is thought that meta-analysis including more papers will be published, and this study will be a stepping stone for such studies.

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