The authors reported no conflicts of interest.

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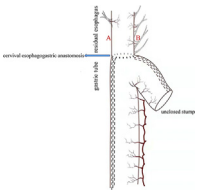

LENGTH OF "NAKED" RESIDUAL ESOPHAGUS AND CORRELATION WITH THE OCCURRENCE OF CERVICAL ANASTOMOTIC LEAKAGE AFTER ESOPHAGECTOMY

To the Editor:

In the recently published article by Takeda and colleagues,[1] the authors concluded that supercharged cervical anastomosis for esophagectomy resulted in a significant perfusion improvement, which correlated with a promising 0% anastomotic leakage rate compared with a 10.5% anastomotic leakage rate in a control group.

Eliminating esophagogastric anastomotic leakage after esophagectomy is a never-ending struggle. Generally, the tissue perfusion of the anastomosis is closely associated with the occurrence of anastomotic leakage. After gastric tube reconstruction, the remnant gastric tube is vascularized only through the gastroepiploic artery and vein (when the right gastric vessel was ligated). Considering the morphologic characteristics of the gastroepiploic arteries,[2] the submucosal blood plexus of remnant gastric tube may be the main source of blood perfusion to cervical esophagogastric anastomosis. To improve the inadequate anastomotic perfusion, much effort and refinements have been made. For example, studies have shown that widened gastric nonvascular area[3] and supercharged cervical anastomosis[1] could reduce the occurrence of anastomotic leakage. However, few have considered the influence of the length of "naked" residual esophagus on the blood perfusion of anastomosis.

Anastomotic leakage is more likely to occur in cervical esophagogastric anastomosis compared with intrathoracic esophagogastric or esophagojejunal anastomosis.[4] Limited submucosal blood plexus of remnant gastric tube maybe the probable cause of cervical esophagogastric anastomotic leakage. To complete esophagogastric (esophagectomy for esophageal cancer) or esophagojejunal (total gastrectomy for gastric cancer) anastomosis, residual esophagus was conventionally mobilized, which is based on the following 3 considerations: (1) esophagogastric or esophagojejunal anastomosis is more convenient; (2) reinforcement of anastomosis is further facilitated; and (3) reckon the contribution of esophageal vessels to anastomotic perfusion unimportant. Esophagus is a relatively fixed organ, and there exists bands of fibrous tissue between the esophagus and the surrounding organs. Frequently, we noticed microvessels embedded in the fibrous tissue under the magnified view in thoracoscopic surgery (Figure 1). In the case of inadequate blood perfusion, excessive cervical esophagus mobilization may be another main obstacle to anastomotic healing. Therefore, in our clinical practice, the blood perfusion of interest was set at the remnant esophagus and we tried to avoid excessive dissection during cervical esophagus mobilization. Our data show that an end-to-side mechanically cervical anastomosis with maintained fibrous tissue (microvessels) between the esophagus and the surrounding organs can largely reduce the occurrence of anastomotic leakage. So, is this practice without a time-consuming vascular anastomosis similar to supercharged esophagogastrostomy? We wish the authors had reported a few more details about operative methods and it might be helpful in clinical practice.

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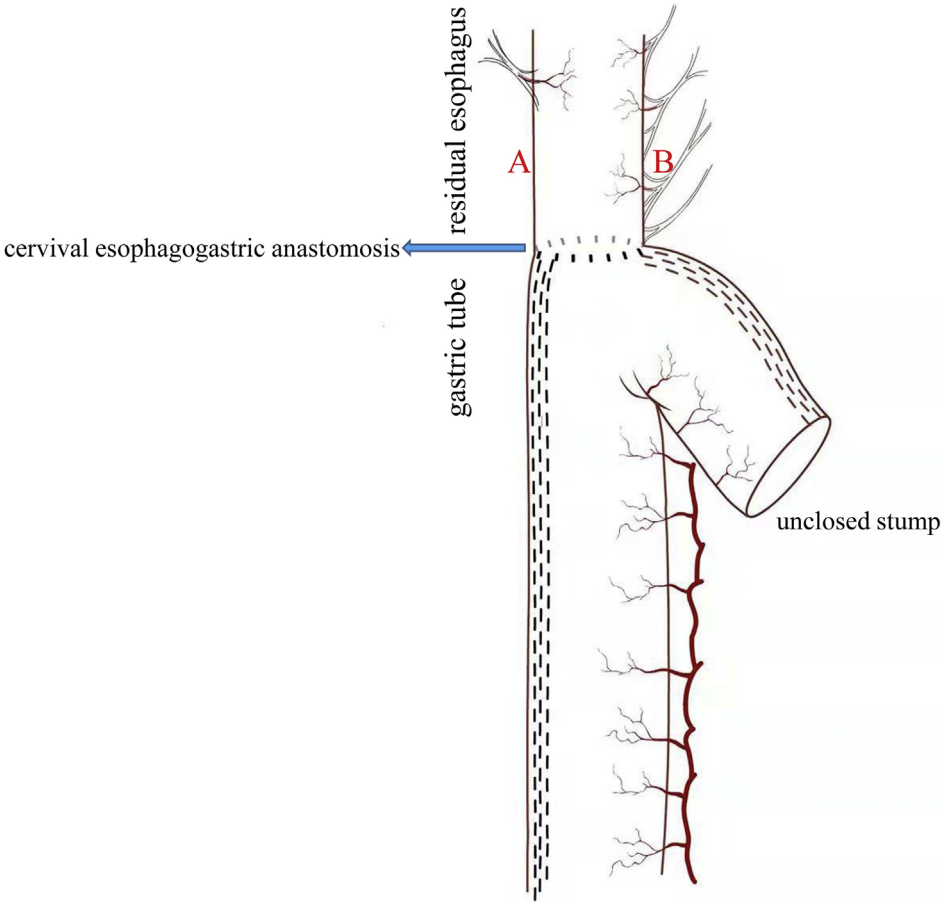

FIGURE 1. Cervical esophagogastric anastomosis. A, Excessive cervical esophagus mobilization. B, Maintained fibrous tissue (microvessels).