Date Commentary

See Article page 1613.



Commentary: To do, or not to do, that is the question

Hiroshi Date, MD

Chronic allograft dysfunction is undoubtedly the most important unsolved problem in lung transplantation (LTx). Both alloimmune-dependent factors and alloimmuneindependent factors contribute to the development of chronic allograft dysfunction. Among alloimmuneindependent factors, micro-aspiration due to esophageal reflux is well known, and previous investigators have suggested the benefits of antireflux surgery in improving lung function and survival. However, for patients with poor esophageal clearance due to aperistalsis, antireflux surgery most likely result in postfundoplication dysphagia. It is for this reason that most transplant centers are reluctant to offer LTx to the patients with significant aperistaltic esophagus.

In this issue of the *Journal*, Matsuda and colleagues² reported a single institutional retrospective study to explore the clinical course of LTx recipients diagnosed with an aperistaltic esophagus on pretransplant testing and to assess the impact of esophageal peristaltic improvement on LTx outcomes in these patients. Thirty-one patients with aperistaltic esophagus were identified and compared with 31 patients with normal esophagus by propensity matching. The authors found that posttransplant recovery of esophageal motility was seen in 65% of recipients in patients diagnosed with aperistaltic esophagus before LTx. Importantly, the patients who showed improved motility post-LTx had comparable survival with patients with normal esophageal motility based on pre-LTx highresolution manometry. The authors concluded that esophageal aperistalsis is not necessarily a contraindication for LTx, and improved peristalsis can be expected in up to two-thirds of these patients and is associated with good outcomes.

From the Department of Thoracic Surgery, Graduate School of Medicine, Kyoto University, Kyoto, Japan.

Disclosures: Author has nothing to disclose with regard to commercial support. Received for publication Feb 17, 2020; accepted for publication Feb 17, 2020; available ahead of print Feb 25, 2020.

Address for reprints: Hiroshi Date, MD, Department of Thoracic Surgery, Graduate School of Medicine, Kyoto University, 54 Kawahara-cho, Shogoin, Sakyo-ku, Kyoto 606-8507, Japan (E-mail: hdate@kuhp.kyoto-u.ac.jp).

J Thorac Cardiovasc Surg 2020;160:1627

0022-5223/\$36.00

Copyright © 2020 by The American Association for Thoracic Surgery https://doi.org/10.1016/j.jtcvs.2020.02.070



Hiroshi Date, MD

CENTRAL MESSAGE

Esophageal aperistalsis may not be necessarily a contraindication for lung transplant because improved peristalsis may be expected in up to two-thirds of these after lung transplant.

It is surprising that two-thirds of patients with aperistalsis did show improvement in esophageal motility by LTx without clear known mechanism. Of note was that 1 of 5 patients with systemic sclerosis also showed recovery. The authors are to be congratulated for accepting these high-risk patients for LTx and showing encouraging outcomes.

One of the step-back findings in this study was very poor outcome in patients with persistent aperistalsis, which occurred in one-third of patients. Figure 3, A, showed that their 3-year survival was less than 20%. Obviously, it would not be justified to offer LTx to these patients.

At this moment, there is no way to predict recovery of aperistalsis before LTx. When we face patients with esophageal aperistalsis, should we accept them for LTx because two-thirds of them would show acceptable outcome or should we reject them because one-third would show poor outcomes? Should we offer LTx to patients with systemic sclerosis and severe esophageal aperistalsis because of possible recovery in 20%? That is the question.

References

- 1. Hartwig MG, Davis RD. Gastroesophageal reflux disease-induced aspiration injury following lung transplantation. Curr Opin Organ Transplant. 2012;17: 474-8.
- 2. Matsuda T, Mittal SK, Csucska M, Kovacs B, Walia R, Huang JL, et al. Esophageal aperistalsis and lung transplant; recovery of peristalsis after transplant is associated with improved long-term outcomes. J Thorac Cardiovasc Surg. 2020;160: 1613-26.