these findings need to be further verified with a larger cohort. Second, their interpretation of barium esophagrams involved subjective scores of motility and dilation patterns. It is important to validate this methodology.

The gold standard to evaluate esophageal motility still relies on HRM. The authors used distal contractile integral combined with percent of normal, weak, or failed swallows as parameters for persistent esophageal aperistalsis or improved motility. How this classification really relates to postoperative function and how it correlates with graft survival requires more patients for validation. Novel methods to evaluate esophageal function, such as the EndoFlip Impedance Planimetry system 2.0 (Medtronic, Minneapolis, Minn), may be worth exploring in the future.⁶

See Article page 1979.

Commentary: To know yourself is to know your neighbor

Keita Nakanishi, MD, and
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Lung transplantation (LTx) is the final treatment for patients with end-stage lung disease with severe respiratory failure. However, the prognosis after LTx is worse than that after other solid organ transplantations, mainly because of chronic lung allograft dysfunction.¹ Impaired esophageal motility has been identified as a post-LTx risk factor for chronic lung allograft dysfunction.² Previously, Masuda and colleagues,³ supervised by Dr Bremner, demonstrated that esophageal motility could improve after LTx even in patients with esophageal aperistalsis. In addition, they also reported that the patients with improved esophageal

Toyofumi Fengshi Chen-Yoshikawa, MD (left), and Keita Nakanishi, MD (right)

CENTRAL MESSAGE

The combination of type of primary lung disease and results of barium esophagography might better predict improved esophageal motility after lung transplant in patients with an aperistaltic esophagus.

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peristalsis (IEP) had long-term survival rates comparable to patients with normal preoperative peristalsis.⁴ For the next step, it is important to determine which LTx candidates who have aperistalsis are most likely to acquire IEP after LTx.

In their recent study, Giuliani and colleagues⁵ focus on 29 patients with complete aperistalsis and investigate factors associated with IEP, as well as risk factors for persistent

esophageal aperistalsis, based on the findings of high-resolution manometry performed before and after LTx to optimize the selection of those candidates with preoperative esophageal aperistalsis. Overall, this study provides important information regarding the interaction of motility disorders and LTx. Giulini and colleagues⁵ successfully demonstrate that patients with obstructive lung disease or pulmonary arterial hypertension are significantly more likely to show IEP after transplant compared with those with restrictive lung disease. Furthermore, they reported that none of the 4 patients with diffuse systemic sclerosis (ie, scleroderma) improved postoperatively. Thus, they clearly demonstrate that primary diagnosis that led to LTx was an important factor in acquiring IEP in patients with esophageal aperistalsis. It is helpful for surgeons to determine which lung transplant candidates with aperistalsis are most likely to acquire IEP, and a better prognosis, post-transplant. Furthermore, identification of the factors associated with IEP after LTx will be necessary and may help guide pretransplant decisions and patient counseling.

The present study was a single-center experience with a small sample size, although the condition examined was very rare. Although patients in the present study were well selected, they did not represent the general patients with esophageal aperistalsis. Therefore, although these results are encouraging and add to our understanding of esophageal dysfunction in the context of LTx, these findings should not be interpreted in their current form when

offering transplant to all patients with aperistaltis. Details about the incidence of vagal dysfunction were not well investigated. We hope that Giulini and colleagues will formulate another study from their current preliminary investigation of a small sample that can be made more reliable with the collaboration of multiple high-volume centers to generate larger sample sizes. Only then would we be able to confirm whether the patients with aperistalsis with obstructive lung disease and pulmonary arterial hypertension are more likely to recover esophageal function after transplant and expected to have normal survival. Furthermore, aperistalsis and scleroderma might be an unfavorable combination, and patients from this subset should be cautiously selected for transplant.

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