RECONSTRUCTION OF THE PHARYNX AND CERVICAL ESOPHAGUS USING FREE JEJUNAL TRANSFER

Gregory P. Reece, MD, Bradley P. Bengtson, MD, and Mark A. Schusterman, MD

Few procedures in reconstructive surgery have had such a profound impact on patient quality of life as total reconstruction of the pharynx and cervical esophagus after larvngopharyngectomy. Patients requiring this ablative procedure must struggle with several disturbing issues: the presence of a serious malignancy, the need for multimodality therapy, the loss of natural speech, and the possible requirement of permanent nonoral feeding. For some patients, the loss of speech22 and swallowing are of greater concern than long-term survival. Thus, the expectation that oral function can be restored after pharyngoesophageal reconstruction is one of the most important factors motivating a patient to endure a laryngopharyngectomy.

Because the 5-year survival rate is only 25% to 35% for patients with locally advanced carcinoma of the cervical aerodigestive tract, resection of disease and subsequent reconstruction are considered palliative. 15 35 36 The method of reconstruction selected, therefore, must be a reliable, one-stage procedure with minimal morbidity and mortality, and one that restores swallowing function in the shortest time possible. Although many techniques have been described for circumferential pha-

ryngoesophageal reconstruction,^{2, 14, 16, 25, 26, 31, 40, 41} free jejunal transfer (FJT) has several advantages, making it the best option for reconstruction of most defects.

Unlike other techniques of pharyngoesophageal reconstruction,² ^{14, 26, 40} FJT is a one-stage procedure that does not require a thoracic dissection and is not restricted by pedicle length, previous gastric surgery, or partial laryngeal resection. Defects of almost any size or location in the pharynx and cervical esophagus may be reconstructed with a tension-free bowel anastomosis. Additionally, FJT may be used to protect the cervical vasculature and to reconstruct partial^{6,8,38} or composite defects of the pharyngoesophagus.^{4,24,37}

Despite the technique's efficacy and versatility, enthusiasm for FJT is not unanimous. The microvascular anastomoses required for FJT are perceived as unreliable by some surgeons, who have concluded that the technique is associated with a high failure rate.^{32, 34} Other methods of pharyngoesophageal reconstruction, such as the gastric pull-up and the pectoralis major flap,^{9, 20, 34} continue to be advocated as alternatives to FJT, despite a higher operative mortality (11%³⁴ and 20%³³), a higher fistula rate (35%⁹ and 40%³³), and a

From the Department of Reconstructive and Plastic Surgery, The University of Texas M. D. Anderson Cancer Center, Houston, Texas