

Surgical management of acquired benign tracheoesophageal fistula: Technical aspects and suggestions

Sir,

Acquired benign tracheoesophageal fistula (TEF) is a rare but serious condition and most often requires surgical treatment. Yuan *et al.* recently reported a new surgical approach using thoracoacromial artery perforator flap through a midsternal incision to repair acquired intrathoracic nonmalignant TEFs.^[1] We appreciated the anterior transtracheal approach adopted from the authors for the identification of the TEF: because, in such instance, dissection in the tracheoesophageal groove may lead to recurrent laryngeal nerve injury and extensive tracheal devascularization due to marked inflammation.^[2] The authors performed a midsternal incision or a partial splitting of the sternum to gain exposure of the trachea that was divided at the middle point of the TEF. In two recently published cases on surgical management of postintubation TEF, we performed a low cervical collar incision: after a complete tracheal transection and retraction of the distal tracheal stump, the fistulous tract was identified and divided, avoiding in this way a partial or a full median sternotomy.^[3,4] In two cases of large fistulas, the authors reported a direct closure of the tracheal defect: although this procedure can lead to tracheal stenosis, no signs or symptoms of dyspnea were observed in their patients. Direct closure of large defects in the membranous wall of the trachea, however, can increase the risk of dehiscence: to avoid this complication, some investigators have proposed a tracheoplastic technique using a synthetic bioabsorbable patch covered with a muscle flap to repair the membranous tracheal wall in patients with large, noncircumferential central airway defects. This technique has a double advantage because the muscle flap applied to the posterior surface of the prosthesis gives support to airway repair and at the same time the synthetic patch acts as a rigid support for the muscle, thus reducing the risk of bulging into the tracheal lumen.^[3,5] The pedicled thoracoacromial artery perforator flap used by the authors for esophageal reconstruction is an extremely interesting choice and has several advantages, such as long vascular pedicle and thin skin paddle; moreover it is a valid alternative to the pectoralis major myocutaneous flap, reducing donor-site deformity and muscle functional impairment. Some investigators, however, have reported variations of origin and branching pattern of the thoracoacromial

artery: the knowledge of these variations is important for the reconstructive procedures and a preoperative perforator mapping using computed tomography angiography and color Doppler imaging could be useful. The pedicled thoracoacromial artery perforator flap, moreover, can lead to impaired esthetic outcomes in female patients for residual nipple asymmetry, may be difficult to harvest in patients with increased chest adipose tissue, and may have no suitable perforators due to unsatisfactory size: in such instances, alternative ways to solve these issues are necessary.^[6,7]

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Conflicts of interest

There are no conflicts of interest.

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