Letter to the Editor concerning “Infrahyoid muscle flap for pharyngeal fistulae after cervical spine surgery: a novel approach—report of six cases” (by R.O. Seidlet al.)

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Dear Editor,

We have read with interest the paper by Dr. Seidl et al. “Infrahyoid muscle flap for pharyngeal fistulae after cervical spine surgery: a novel approach—report of six cases” [2]. They describe a rather elegant technique to repair perforation of the pharynx and the esophagus using the strap muscles as a vascularized flap. In their experience, closure of all the defects was achieved with no complications. In addition, they were able to remove the nasogastric tube within 2 weeks of the operations in all patients, which is a remarkable fact. They also compare the infrahyoid muscle flap with the sternocleidomastoid muscle (SCM), stating that the former has distinct advantages: clearly defined vascular blood supply and better capability to be modeled.

In a previous similar study, we presented our experience of using the SCM flap to reconstruct esophageal fistulae after anterior cervical spine surgery [1]. We also achieved closure of all the defects using this technique. However, our patients stayed significantly longer on nasogastric feeding. This fact could be partly explained, because of our patient population: one of our cases had significant lower cranial nerve dysfunction secondary to a cervical chordoma, as we mention on the manuscript, and two other patients had a low level of consciousness for a significant

time due to concomitant head trauma. We do not agree with the statement that the SCM flap has modeling limitations, since it is the bulkiest muscle on the anterior part of the neck, it is pliable, it has a multifocal blood supply, and therefore it can be fitted in many different ways without the need of using the whole muscle mass. Hence, its function can be mostly preserved (head rotation and deep inspiratory effort). In contrast, in the technique described by Dr. Seidl et al. the whole ipsilateral infrahyoid muscle group is used, and thus its function might be affected (deglutition and deep respiratory effort). Spinal surgeons should not forget that accessory respiratory musculature could be very important when dealing with patients affected by high spinal cord injuries. In addition, it might be easier for spinal surgeons, namely neurosurgeons or orthopaedic surgeons, to harvest the SCM flap rather than an infrahyoid muscle flap, since there is no need either to dissect the *ansa cervicalis* nor the superior thyroid artery and vein. We understand that head and neck surgeons might feel quite comfortable using the infrahyoid muscle flap, since it was originally designed to deal with otolaryngological conditions. Finally, we do concur with the authors that local vascularized flaps are the method of choice to repair pharyngeal and upper esophageal defects related to anterior cervical surgery.

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