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**COMMENTARY** 

## Commentary on the article "Reconstruction of circumferential pharyngeal defects after tumour resection: reference or preference"

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This article presents an important conclusion as a guideline for the reconstruction of circumferential pharyngeal defects. The healing between skin and mucosa is slower than that between mucosa and mucosa (or skin-skin). The functional results of swallowing are also better with intestinal flaps. However, when a plastic surgeon is facing a large defect of pharyngo-oesophagus, he probably chooses skin flaps which are more familiar to him. As pointed out by the authors, the rates of leakage and fistula as well as later stricture are much higher in the groups of skin flaps (pectoralis major (PM) and anterolateral thigh (ALT)). Currently, PM and ALT flaps are acceptable methods for reconstruction of these defects. However, the authors point out that the jejunal flap is a better choice, which is correct but is not used by many surgeons. After this article. more plastic surgeons would be encouraged to select the jejunal flap, which is of course better for the patients.<sup>1,2</sup>

However, the results of this series can be improved with the following procedures:

- (1) The edge of the skin flap can be de-epithelised for 0.5 cm to increase the contact surface and to facilitate healing of skin-to-skin as well as skin to mucosa while doing the anastomoses.
- (2) Proper drainage and air vent can offset the pressure when the patients are coughing. In the postoperative few days,

- suction of the saliva from the mouth can be considered when skin flap is used. The saliva can be very tenacious and may stagnate in the lumen of the skin tube to cause leakage, especially when the patient coughs.
- (3) Postpone the time for the patients to eat from the mouth till 1 month after surgery, especially for patients after radiation therapy or patients of poor nutrition.
- (4) When a skin tube is selected for reconstruction of pharyngo-oesophagus, arrange the line of skin-to-skin anastomosis to face posteriorly, and add sutures between the soft tissue (or fascia) of the skin tube to the background tissue.

Late stricture often happens at the junction between the cervical and thoracic oesophagus. When a skin flap is used, the leakage can be decreased by inserting two nasogastric (NG) tubes across the anastomosis between the cervical and thoracic oesophagus. The other option is to use only one NG tube, but it should be soft and can be bent to become two tubes to spread out the junction between the cervical and thoracic oesophagus. Another important issue is prevention of leakage, which is associated with the later development of stricture due to inflammation. This has been pointed out by the authors.

The authors did not use fabricated jejunal flaps for reconstruction when the defects starts very high up in the oropharynx. At the cephalic end, two barrels of jejunal flaps can be fabricated to form a larger lumen to meet the large circumference of oropharynx for the high defects. Distally, the size of a single jejunal segment fits well the

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circumference of thoracic oesophagus. This is a good option to deal with the size discrepancy.

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The authors did not use colon for reconstruction of pharyngo-oesophagus. When the larynx is also missing, the ileocolon flap can be employed for simultaneous reconstruction of oesophagus and voice, using the colon segment for pharyngo-oesophagus and the ileum segment for the voice tube. The results of swallowing and speech are promising in several centres.

## References

- 1. Yu P, Lewin JS, Reese GP, et al. Comparison of clinical and functional outcomes and hospital costs following pharyngoesophageal reconstruction with the anterolateral thigh flap versus the jejunal flap. *Plast Reconstr Surg* 2006;117:968–74.
- 2. Nakatsuka T, Harii K, Asato H, et al. Analytic review of 2372 free flap transfers for head and neck reconstruction following cancer resection. *J Reconstr Microsurg* 2003;19:364—8.

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