We thank Thakkar and colleagues [1] for their interest in our article [2].

The choice of oesophageal reconstruction route, generally between the anterior (AR) and the posterior mediastinal route (PR), is not only the first decision for the surgeons to make after oesophagectomy, but also a long-lasting controversy in oesophageal surgery.

In our experience, there are three major aspects to be taken into consideration: the first is the long-term effect on the patients and the purpose of the surgery; the second is the surgeon’s preference and proficiency; and the third is the perioperative morbidity and mortality. For the first consideration, the difference in survival between patients who have undergone AR and PR has never been reported in any randomized clinical trial (RCT). However, there is no doubt that the application of AR provides patients with extra benefits on admission for postoperative irradiation of the tumour bed and avoids infiltration by locally recurrent tumour, which is important for subsequent treatment and survival.

The surgeon’s preference and proficiency is a factor that is hard to depict and control but necessarily important for the effect of the treatment. It is commonly accepted that a shorter route can facilitate the reconstruction procedure, which could be a factor in the ‘first choice’. We have demonstrated both in patients intraoperatively [3] and in cadavers [2] that the AR is a shorter choice for the gastric conduit to reach the cervical anastomosis, and this conclusion could provide a sound anatomical basis for surgeons to make their decisions.

Considering the perioperative morbidity and mortality, we agree with Thakkar and colleagues that current data are still insufficient to declare the superiority of either route. Taking leakage of the cervical anastomosis as an example, a meta-analysis [4] based on four RCTs and an additional RCT [5] mainly applying a transhiatal oesophagectomy or a minimal invasive oesophagectomy procedure reported that their leakage incidence in the AR group ranged from 7.1 to 32.5%, but this was not significantly higher than in the PR group according to the meta-analysis (relative risk 1.01, 95% confidence interval 0.35–2.94; \( P = 0.98 \)). While experience from retrospective studies, most of which concerned transthoracic oesophagectomy, suggested an unacceptably higher leakage incidence using the AR approach. Besides their possibly palliative use of the AR approach, it occurred to us that the details of the oesophageal reconstruction via AR should be addressed to extend patients' advantage. In one of our recent comparative studies [6], we made several modifications to the reconstruction via AR after a three-incision oesophagectomy, which included expanding the retrosternal tunnel, widening the gastric tube, resection of the sternothyroid muscle and fixation of the gastric tube, which we termed Chen’s procedure. As a result, patients received improved AR reconstruction had a significantly lower incidence of leakage of the anastomosis compared with patients who received a routine AR reconstruction without modifications (4.84 vs 20%; \( P = 0.037 \)).

It is hard to say whether there is a ‘best surgery’ for oesophageal cancer, but we are extending our research in order to provide more convincing results, and we look forward to further RCTs in order to provide evidence-based and individualized treatment of patients.

REFERENCES


