Extended end-to-end anastomosis of jejunal free graft as a pharyngoesophageal reconstruction

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Background

Pharyngoesophageal reconstruction using jejunal free graft(JFG)has been widely used due to its closeness in diameter to the esophagus, the feasibility of attaining the graft and its low morbidity rate. This is a reliable procedure, but is technically demanding.

Methods

Pharyngojejunal anastomosis is performed afterextended longitudinal incision is made at the opposite corners of the pedicle in the proximal JFG. This maneuver reduces the size discrepancy between the pharynx and jejunum without graft tension.

We retrospectively analyzed the medical records of 22patients diagnosed with pharyngeal, esophageal, or pyriform sinus cancer who received a JFG after laryngopharyngectomy.

Results

There were 17 males and 5 females with median age 65 years(range 42-76). Jejunal vessels were commonly anastomosed to right common carotid artery and the right internal jugular vein(68.2%).
The median ischemic time of the JFG was 45 minutes(range 30-58). The median carotid artery clamping time was 15 minutes(range 10-21).

During the procedure, three patients suffered from inadequate reperfusion of the JFG requiring the removal of the initial graft and replacement by another JFG. In three patients, intraoperative spasm of jejunal artery occurred during the reperfusion, which was immediately restored with mechanical dilatation. There were no postoperative deaths and no adverse events directly related JFG except one anastomosis leakage of the proximal part, which was primarily repaired. Thirteen patients(59%) received postoperative adjuvant radiotherapy. 5-year survival rate was 74.6%.

Conclusions

We suggestthat our method can be applied in most cases of pharyngoesophageal defects, providing simple and reasonable reconstruction using JFG with stable results. Once the JFG has intraoperative adequate perfusion, postoperative course would be stable without ischemic events.