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Slide Pharyngo-Esophagostomy Following Ablation of Hypopharyngeal Cancer

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Abstract

We describe a procedure of slide pharyngo-esophagoplasty for restoration following ablation of hypopharyngeal cancer in a 99 year-old man. The elderly presented to our hospital with 2-month dysphagia, occasional bloody salivation, and 2-day respiratory distress. To solve the problems of swallowing difficulty and dyspnea, he underwent laryngopharyngectomy, permanent tracheostomy, and slide pharyngo-esophagoplasty. The patient was uneventful after the restoration procedure.

Keywords

Hypopharyngeal Cancer, Laryngopharyngectomy, Slide Pharyngo-Esophagoplasty

1. Introduction

Common restoration procedures following ablation of hypopharyngeal cancer are pectoralis major myocutaneous flap, radial forearm free flap, free jejunal flap, gastric pull-up reconstruction, ileocolon pull-up reconstruction, and laryngotracheal flap [1] [2] [3]. These procedures usually require a long operation time and some of them require microscopic vascular anastomosis. Herein, we report a simple procedure of slide pharyngo-esophagostomy to restore the pharyngeal defect after ablation of hypopharyngeal cancer.

2. Case Presentation

A 99 year-old man had history of diabetes mellitus and pulmonary tuberculosis. He suffered from dysphagia for more than 2 months with occasional bloody salivation. Endoscopy showed an 8 cm \times 6 cm mass in the hypopharynx (**Figure 1**), and computed tomography revealed the larynx was invaded by the hypopha-



Figure 1. Endoscopy showed an 8 cm \times 6 cm mass in the hypopharynx.

ryngeal cancer (**Figure 2**). The elderly presented with 2-day respiratory distress before surgery. He underwent laryngopharyngectomy, permanent tracheostomy, and slide pharyngo-esophagoplasty following ablation of the hypopharyngeal cancer. A near circumferential defect was observed at the anterior pharyngeal wall. The slide pharyngo-esophagoplasty consisted of pull-up of esophagus around 8 cm after dissection at the cervicothoracic region, posterior split of the proximal esophagus, and direct pharyngoesophageal anastomosis (**Figure 3**). Total operation time including a feeding gastrostomy was 4 hours and 45 minutes. The nasogastric tube was removed on postoperative day 2. He was allowed oral intake on post-op day 9 and was very well in a 5-month follow-up.

3. Comments

A circumferential or near circumferential defect usually present following ablation of hypopharyngeal cancer that requires a suitable procedure to accomplish the restoration. A large circumferential defect of pharynx required more tissue to repair. In a review article, reconstructive options include pectoralis major myocutaneous flap, gastric pull-up, pedicled latissimus dorsi myocutaneous flap, thoracodorsal artery perforator flap, supraclavicular flap, ileocolon flap, gastro-omental free flap, colon interposition, and sternocleidomastoid myocutaneous flap, etc. [4]. These above reconstructive procedures usually require a long operating time. Postoperative complication includes graft failure, fistula, or anastomotic stricture [1] [2] [3] [4]. According to our previous experimental study, a long esophageal stump could be viable after mobilization [5]. Meanwhile we have performed a slide pharyngo-esophagostomy in a patient with corrosive stricture at the esophageal orifice [6]. In the presented 99-year elderly, endoscopy showed tumor obstruction at the hypopharynx and computed tomography revealed laryngeal compression by the hypopharyngeal carcinoma. The patient's ECOG performance status was grade-3. Preoperative considerations included the old age, the patient's performance, and a total operating time. Hence, to solve the patient's problems of dysphagia and dyspnea, an urgent simple sur-

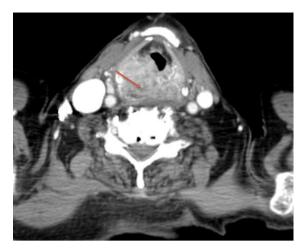


Figure 2. Computed tomography revealed the larynx was invaded by the hypopharyngeal cancer (arrow).

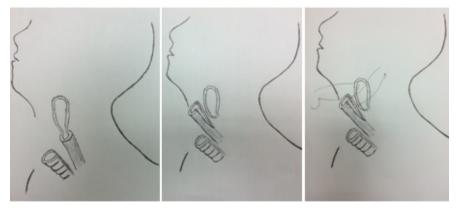


Figure 3. A near circumferential defeat presented following ablation of hypopharyngeal cancer (left), pull-up of esophagus around 8 cm and posterior split of the proximal esophagus (middle), and direct pharyngoesophageal anastomosis (right).

gical intervention was needed. We favor the slide pharyngo-esophagostomy to repair the near circumferential pharyngeal defect because it is simple and needs a shorter operation time.

Disclosure

The authors declare no conflict of interest.

Informed consent was obtained from the patient to report the case.

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