Abstract

OBJECTIVES: To describe a new and efficient method of performing total laryngectomy and simultaneous tracheoesophageal puncture using a hybrid device assembled from the components of two commercially available voice prostheses.

METHODS: Retrospective case review. Study period: January 2009 to September 2010. Disease/condition studied: Malignant neoplasms of the larynx/pharynx. Subjects studied: Thirteen patients who underwent total laryngectomy for malignancy of the larynx and/or pharynx at Stanford University Medical Center, Stanford, California.

RESULTS: There were no device failures. There were no complications. The procedure was performed primarily in five cases, and secondarily in eight cases. Twelve patients underwent general anesthesia, and one underwent local anesthesia only. Five procedures were performed in the setting of stapler-assisted total laryngectomy, and eight were performed with conventional closure. The tumor histology included low grade chondrosarcoma in one patient and squamous cell carcinoma of the larynx or pharynx in the remaining patients. Twelve patients received preprocedure radiation therapy, one patient received no radiation therapy.

Conclusions

Combining the components of two commercially available TEP kits has allowed the construction of a hybrid device which has proved reliable and efficient for simultaneous TEP and stapler-assisted total laryngectomy. This hybrid device simplifies the technique of TEP, making it more efficient and safe for office-based and outpatient (inpatient or outpatient) procedures. A hybrid device and technique described here offers advantages including decreased equipment cost, less steps involved, and a shorter learning curve. The voice prosthesis selected should be easy to use, cost-effective, and offer improved performance compared to traditional methods.

References


