

# **Long-term outcome of Laryngeal Framework Reconstruction Using Titanium Mesh in Glottic Cancer after Frontolateral Vertical Partial Laryngectomy**

LIE-QIANG LIAO MD ; WEI-WEI LIU, MD, Ph.D;HAO LI, MD, Ph.D;

QIU-LI LI, MD, Ph.D; HONG-HONG YAN, MD; DI WU, MD ;

AN-KUI YANG, MD ; QUAN ZHANG, MD, Ph.D;

ZHU-MIN GUO, MD; XUE-KUI LIU, MD, Ph.D

## **Correspondence**

Address correspondence to: Xue-Kui Liu, MD, PhD. Department of Head and Neck Surgery, Cancer Centre Sun Yat-Sen University, 651 Dongfeng Road East, Guangzhou Guangdong 510060, China, liuxk@sysucc.org.cn

## **Abstract**

**Objectives:** To present long-term outcome of laryngeal framework reconstruction using titanium mesh in T2 and T3 glottic cancer after frontolateral vertical partial laryngectomy.

**Methods:** Defect of laryngeal framework, caused by frontolateral vertical partial laryngectomy in 36 patients with T2 or T3 SCC of glottic, were reconstructed with titanium mesh from December 1, 2007 to March 1, 2014. The duration of follow-up ranged from 12 to 82 months.

**Results:** 8 patients had temporary tracheostomy. 2 elderly patients required temporary nasogastric tube feeding. All 36 patients have varied degree of hoarseness but normal conversational voice can often be achieved. 3 patients had nodal recurrence. All 36 patients are alive without local recurrence and

distant metastasis during follow-up.

**Conclusions:** From both a functional and oncologic point of view, our long-term results in 36 patients with T2 or T3 SCC of glottic showed that titanium mesh was a good alternative for reconstruction of the laryngeal framework.

**Key Words:** Titanium mesh, laryngeal framework reconstruction, squamous cell carcinoma, glottic carcinoma, Frontolateral vertical partial laryngectomy.