



ORAL

# Transoral Laser Microsurgery for Early Glottic Cancer

Nguyen Thanh Tuan, Tran Phan Chung Thuy

School of Medicine, Vietnam National University - Ho Chi Minh City

## Abstract

### Background:

For the treatment of early glottic cancer (T1/T2N0M0), different treatment options, such as transoral laser microsurgery, open surgical techniques, and primary radiotherapy, are under discussion. In this context, the aim of the present study was to describe oncologic results and complication rates of transoral laser microsurgery in treatment of early glottic cancer.

### Methods:

A prospective cohort study in Ho Chi Minh City Ear Nose Throat Hospital included early stages (T1/T2N0M0) glottic cancer patients scheduled to undergo transoral laser microsurgery from January 2016 until June 2017. Data on demographics, site and extent of disease, treatment, complication and early outcome were collected and analyzed.

### Results:

30 early stages glottic cancer cases were exclusively treated by TLM and included into this study, 29 (96.7%) patients were male and 1 (3.3%) were female. The mean age was 61.1 years ( $\pm 9$  years). 96.7% tumours is T1 and 3.3% for T2. The presence of intraoperative complications (bleeding) was low, affecting only 2 patients. Immediate postoperative complications (bleeding) occurred in 1 patients (3.3%), whereas delayed complications affected 3.3% of patients (1 laryngeal synechia), without any of them being fatal. 30% of patients had normal voices and a further 63,3% had only mild or moderate voice change. At their last followup, no patients assessed had any difficulty respiratory or swallowing to their treatment for glottic cancer.

### Conclusion:

TLM has shown good results and low complication rate compared with traditional open surgery and EBRT, and thus shows utility as a primary treatment modality for early glottic cancer.

## Keywords

Early glottic cancer, Early glottic carcinoma, Transoral laser microsurgery (TLM), Carbon dioxide laser, Organ preservation.

## Funding

## References

1. Ambrosch, P (2003). Lasers in the upper aerodigestive tract in malignant diseases. *Laryngorhinootologie*, 82 Suppl 1: p. S114-43.
2. Ansarin, M., et al (2006). Endoscopic CO2 laser surgery for early glottic cancer in patients who are candidates for radiotherapy: results of a prospective nonrandomized study. *Head Neck*, 28(2): p. 121-5.
3. Arffa et al. Normative Values for the Voice Handicap Index-10. *Journal of Voice* 2012. Volume 26, Issue 4, Pages 462-465
4. Barnes, L., et al (2005). World Health Organization Classification of Tumours. Pathology and Genetics of Head and Neck Tumours. Third Edition ed, IARC. 54.
5. Bocciolini, C., L. Presutti, and P. Laudadio (2005). Oncological outcome after CO2 laser cordectomy for early-stage glottic carcinoma. *Acta Otorhinolaryngol Ital*, 25(2): p. 86-93.

\*For correspondence:

nttuan@medvnu.edu.vn

Competing interests: The authors declare that no competing interests exist.

Received: 2017-06-27

Accepted: 2017-08-12

Published: 2017-09-05

Copyright The Author(s) 2017. This article is published with open access by BioMedPress (BMP).

This article is distributed under the terms of the Creative Commons Attribution License (CC-BY 4.0) which permits any use, distribution, and reproduction in any medium, provided the original author(s) and the source are credited.