



ORAL PRESENTATION

Open Access

# The use of CO<sub>2</sub> laser in tumour resection of the oropharyngeal region

Waseem Jerjes\*, Tahwinder Upile, Zaid Hamdoon, Colin Hopper

From 2nd Scientific Meeting of the Head and Neck Optical Diagnostics Society  
San Francisco, CA, USA. 23-24 January 2010

## Introduction/aims

The incidence of oral squamous cell carcinoma (OSCC) remains high. Oral carcinomas are the sixth most common cancer in the world.

This prospective study evaluated the oncological outcomes following transoral CO<sub>2</sub> laser resection of T1/T2 N0 OSCC. Patients' three-year disease-specific survival and disease-free survival were evaluated, including post-operative complications.

## Material/methods

The patients' data included a range of clinical, operative and histopathological variables related to the status of the surgical margins. Data collection also included recurrence, cause of death, date of death and last clinic review.

Ninety patients participated in this study. Their mean age at the 1<sup>st</sup> diagnosis of OSCC was 63.5 years. Two-thirds of the patients were Caucasians. Primary sites were mainly identified in the tongue, floor of mouth and buccal mucosa. Pathological analysis revealed that half of the patients had moderately differentiated OSCC.

## Results

Tumour clearance was primarily achieved in 73 patients. Follow-up resulted in a 3-year survival of 87.8%. Recurrence was identified in 12% of the patients. The mean age of 1<sup>st</sup> diagnosis of the recurrence group was 76.4 years. Most common oral sites included the lateral border of tongue and floor of mouth. Recurrence was associated with clinical N-stage disease. The surgical margins in this group were also evaluated.

## Conclusions

Squamous cell carcinoma of the oral cavity has a poor overall prognosis with a high tendency to recur at the primary site and extend to involve the cervical lymph nodes. The overall results of this study were comparable with those of other, larger studies.

Published: 29 October 2010

doi:10.1186/1758-3284-2-S1-O33

Cite this article as: Jerjes *et al.*: The use of CO<sub>2</sub> laser in tumour resection of the oropharyngeal region. *Head & Neck Oncology* 2010 **2**(Suppl 1):O33.

Submit your next manuscript to BioMed Central  
and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at  
[www.biomedcentral.com/submit](http://www.biomedcentral.com/submit)



UCL Department of Surgery, University College London Medical School,  
London, UK