



SDM
College of Dental Sciences & Hospital
Dhavalnagar, Sattur, Dharwad - 580009, Karnataka, INDIA
Recognised by Dental Council of India, New Delhi

“EVALUATING THE DISCREPANCY IN CTNM AND PTNM STAGING IN ORAL SQUAMOUS CELL CARCINOMA”

By

Dr SAHANA L

t-01388

Dissertation Submitted to the

Shri Dharmasthala Manjunatheshwara University, Dharwad, Karnataka,

In partial fulfillment

of the requirements for the degree of

Master of Dental Surgery (M.D.S.)

in

Oral and Maxillofacial Surgery

Under the guidance of

DR VENKATESH ANEHOSUR

PROFESSOR

DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY

**SDM College of Dental
Sciences and Hospital**

Dharwad

February 2023



ABSTRACT

Appropriate clinical staging is critical for patient counseling, treatment planning for the need and type of neck dissection for the patient and predicting the prognosis. TNM staging according to 8th edition gives us the necessary means to stage the patient clinically. When pitched against pathological staging of the same specimen the staging depends on the depth of invasion along with the greatest dimension of the lesion and the microscopic extra nodal extension.

with the appropriate staging the need for adjuvant radio-chemo therapy can be estimated. this can help in the overall survival of the patient.

There is a mismatch between clinical and pathological staging in head and neck squamous cell carcinoma

AIMS AND OBJECTIVES- The purpose of this study was to compare the discrepancy between cTNM and pTNM in patients with OSCC of buccal mucosa treated with primary surgery.

To analyze the discrepancy between cTNM and pTNM in terms of under-staging and over-staging.

Primary objective(s)- The purpose is to compare the discrepancy between cTNM along with CT and pTNM (post-operative histopathological report) in patients with OSCC treated with primary surgery.

Secondary objective(s)- To analyze the discrepancy between cTNM and pTNM in terms of under-staging and over-staging.

MATERIALS AND METHODOLOGY

SOURCE OF DATA- A retro-prospective study was conducted on patients reporting to SDM craniofacial Research centre from February 2021 to February 2023 on patients who were subjected to surgery for resection of primary lesion along with neck dissection and reconstruction procedures.

METHOD OF COLLECTION OF DATA (Criteria for selection and design of study);

Patient selection criteria

Inclusion criteria;

- ❖ Biopsy-proven cases of oscc of buccal mucosa indicated for surgical resection
- ❖ Age group – 20-70years

Exclusion criteria;

- ❖ Other variants of oral carcinoma other than squamous cell carcinoma.
- ❖ Sites other than oscc of buccal mucosa.
- ❖ Patients previously treated surgically for the same and undergoing second surgery due to recurrence will not be included in the study.
- ❖ Patients previously irradiated and received neoadjuvant chemotherapy for the carcinoma will be excluded.

Methodology:

- Pre-op clinical assessment for TNM staging by a single resident/surgeon
- Pre-op evaluation with CT and USG
- Post-operative assessment for pTNM staging by a single pathologist.
- Correlate all data with weighted KAPPA statistics for discrepancies in assessment

Statistical analysis plan: Histopathological examination to be considered as gold standard. Sensitivity, specificity and predictive values of N (nodal status) and M (metastatic status) categories of clinical (cTNM) will be compared against histopathological gold standard. Weighted KAPPA statistics will be used to calculate the measures of agreement between the clinical and histopathological agreement of tumor assessment.

RESULTS-Out of the 64 patients age ranged from 20-70 years. Out of which 10 (15.63%) patients were less than 40 years, 16 (25.00%) patients were between 41-50 years, 23 (35.94%) patients were between 51-60 years the highest number in a group and lastly 15 (23.44%) patients were over the age of 61 years as shown below. With a mean age of 52.67 and standard deviation of 11.14 (table: 1)

Out of 64 patients 51(79.69%) patients were male and only 13 (20.31%) were female patients. Out of 64 patients 37 cases were left side and 27 cases were right side. (figure: 1)

Out of 64 patients 37 cases were left side and 27 cases were right side. (figure: 2, table 2)

According to the AJCC 8th edition of the staging of oral squamous cell carcinoma we categorized the patients to the criteria matching closest. It was noted that 27 patients were categorized as T2 stage and only 7 patients were T1 stage clinically. T3 were 21 patients and T4a were 9 patients. (table: 4, figure:4)

Similarly, according to the AJCC 8th edition of the staging of oral squamous cell carcinoma we categorized the patients to the criteria matching closest. Observation made was N1 had 8 patients, N2a had 18 patients,