

4. MATERIALS AND METHODS.

4.1. Materials.

Information of patients who underwent operation under general anaesthesia in University Malaya Medical Centre (UMMC) from 1st January 1992 until 31st December 2005. Information obtained from the records were patient's name, patient's address, cancer site, histological type, date of diagnosis and where relevant date and cause of death. Besides that, hospital and dental registration number, clinical diagnosis and treatment performed.

Department of records University Malaya Medical Centre and Dental Faculty Record Department- Records of patients diagnosed with squamous cell carcinoma of tongue and treated by multi various modalities.

A standard study form for all patients.

4.2. Methods.

The folders and records of patients were reviewed and recorded into a standard performa designed for this study. Only patients who fulfill all criteria for subject selections will included in this study. Which cases not meet the study requirement will be excluded. Diagnosis must be confirmed through clinical and histopathological examination or either one. Clinical examination will give information regarding anatomical landmark of the lesion including size, site and the extend of lesion including locoregional involvement (neck node) .Patient's status were confirmed by phone call and final status was determined until 31st December 2006.

The clinical details about each tumour will be computed and staged according to UICC stage grouping for oral cancer (1997).The data will be compiled into tables according to the variables which will be studied. The survival outcome is going to be measured by Kaplan Meier analysis. Log Rank Test will used for statistical analysis of variables.

The variables are as below;

1. Age
2. Gender
3. Ethnic group
4. Site of cancer.
5. TNM clinical staging.
6. Clinical staging.
7. Mode of treatment to primary tumour.

8. Histological differentiation – reported of well, moderate and poorly differentiated SCC are graded according to World Health Organization guidelines.
- 9 Neck treatment
- 10 Disease free period
- 11 Survival period – Five years disease specific survival are estimated using the Kaplan – Meier product limit estimate.

4.3. Categorical analysis of data.

1. Age
2. Gender
3. Ethnic group – divided into 4 major groups. Those group are Malay, Chinese, India and others. Those who included into others group comprises of Bumiputras of Sabah and Sarawak and other minor ethnic group.
4. Tumour site.
5. TNM clinical staging – The staging of primary tumour and neck node was done retrospectively according to classification of UICC 1997.
 - T : Primary tumour
 - N : Cervical node involvement
 - M : Distant metastasis.
6. Stage grouping – The entire clinically staged tumour will be group together according to UICC 1997 group staging criteria.

7. Mode of treatment to primary tumour – recorded as list in performa. It could be
Either :
- 1= Primary surgery
 - 2= Primary radiotherapy
 - 3= Preoperative radiotherapy followed by surgery
 - 4= Surgery followed by radiotherapy
 - 5= Others.(Any different treatment from above)
8. Histological differentiation- was determined according to histopathological record available from biopsy and resected specimens.
9. Neck node treatment – as listed below
- 1= Selective neck dissection (ipsilateral)
 - 2= Radical neck dissection (ipsilateral)
 - 3= RND and SND (Bilateral neck dissection)
 - 4= No treatment.
10. Disease free period- is a period of time from the month of treatment completed until month of recurrence detected.
11. Survival period – is a period of time from the month of clinical diagnosis established until the month of patient death (Kaplan – Meier Survival Curve).

4.4. Criteria of case inclusion.

The criteria as below;

1. Subject – The subjects for this study were the patient who were diagnosed with squamous cell carcinoma of tongue and treated between 1st January 1992 until 31st December 2005.(Patient's status was determined by phone until 31st December 2006)
2. Mode of treatment – treatment performed to patients either surgery , radiotherapy, chemotherapy or combination of those treatment.
3. There must be sufficient information regarding the clinical representation of the tumour, so that it can be staged according to TNM classification (UICC 1997).

4.5. Criteria of case exclusion.

The criterias as below;

1. Patient with unretrievable or insufficient records.
2. Patient who treated in other centre.(beside University Malaya Medical Centre).