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Original Research Article

# An analysis of the demography and histology of patients presenting with oral cavity malignancy

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ABSTRACT

**Introduction :** In the modern world one of the most dreaded disease is cancer. Among all the cancers that occur, cancer within the oral cavity ranks as the eleventh most common cancer globally In view of the changing trends in oral cancer we did a study to evaluate the practices followed for oral cancer in our study.
**Materials and Methods :** The present study was a non-randomized prospective observational study that was done on patients who visited hospital and were diagnosed by histopathology as having oral cancer. The study was done at the department of general surgery and surgical oncology at the Father Muller Medical College. Kankanady in the state of Karnataka South India. The study was done. During the study period that extended from March 2014 to February 2020 the following observations were done on a total of 202 cases.
Those who met a predefined criteria and gave a written informed consent were enrolled in the study. They were explained regarding their disease, the treatment options that are available and the alternative treatments if any.
Once the patients was optimized, based on the decision of the tumour board appropriate therapy was given and the complications of each was noted down.
**Results :** During the study period that extended from March 2014 to February 2020 the following observations were done on a total of 202 cases .In the present study between the age of 20 and 60 years we had 148 cases (73.26%), the most common decade involved was 41-50 years with 68 cases (33.66%).
In the productive age group between the age of 21 years and 50 years we had 146 cases. The predominant population affected by oral cancer was male's 164 cases (81.19%)
On evaluation of the clinical presentation distribution in the study subjects all cases presented with ulcer .Lesions of the tongue were seen in 99.01% cases. In most cases wide excision and reconstruction was possible (54 cases) near glossectomy with MRND was done in 1patient hemi glossectomy with MRND was done in 16 patient partial glossectomy with MRND was done in 17 patient.
All case were proved as Squamous cell carcinoma. The minimum follow up was for 13 months and at the last follow-up all cases were found to be tumour free .
**Conclusions:** The mainstay of current. Exciting challenges include improving success rates of current therapy, reducing the morbidity of treatment, and to select the most appropriate treatment.

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## 1. Introduction

In the modern world one of the most dreaded disease is cancer. Among all the cancers that occur, cancer within the oral cavity ranks as the eleventh most common cancer globally.[1,2]

It is estimated that oral malignancies most often affect those countries that have low and middle income, and 50% of these cancers occur in the South East Asian countries particularly in the Indian subcontinent.[3–5]

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In view of the changing trends in oral cancer we did a study to evaluate the practices followed for oral cancer in our study.

## 2. Materials and Methods

The present study was a non-randomized prospective observational study that was done on patients who visited hospital and were diagnosed by histopathology as having oral cancer. The study was done at the department of general surgery and surgical oncology at the Father Muller Medical College .Kankanady in the state of Karnataka South India. The study was done. During the study period that extended from March 2014 to February 2020 the following observations were done on a total of 202 cases.

Those who met a predefined criteria and gave a written informed consent were enrolled in the study. They were explained regarding their disease, the treatment options that are available and the alternative treatments if any.

Once the patients was optimized, based on the decision of the tumour board appropriate therapy was given and the complications of each was noted down.

## 3. Results

During the study period that extended from March 2014 to February 2020 the following observations were done on a total of 202 cases.

**Table 1:** Age distribution in the study subjects

| Age | Frequency | Percentage |
|---|---|---|
| Less than 21 | 2 | 0.99% |
| 21-30 years | 32 | 15.84% |
| 31-40 years | 46 | 22.77% |
| 1-50 years | 68 | 33.66% |
| 51-60 years | 36 | 17.82% |
| 61-70 years | 16 | 7.92% |
| >71 years | 2 | 0.99% |
| Total | 202 | 100.00% |

In the present study between the age of 20 and 60 years we had 148 cases (73.26%), the most common decade involved was 41-50 years with 68 cases (33.66%).

In the productive age group between the age of 21 years and 50 years we had 146 cases.

**Table 2:** gender distribution in the study subjects

| Gender | Frequency | Percentage |
|---|---|---|
| Male | 164 | 81.19% |
| Female | 38 | 18.81% |
| Total | 202 | 100.00% |

The predominant population affected by oral cancer was male's 164 cases (81.19%).

On evaluation of the clinical presentation distribution in the study subjects all cases presented with ulcer.

**Table 3:** Distribution of the site of lesion in the study subjects

| Site | Frequency | Percentage |
|---|---|---|
| Buccal mucosa | 2 | 0.99% |
| Tongue | 200 | 99.01% |
| Total | 202 | 100.00% |

Lesions of the tongue were seen in 99.01% cases.

**Table 4:** Distribution of the surgical management in the study subjects

| Surgical management | Frequency | Percentage |
|---|---|---|
| Hemimanibulectomy +Subtotal Glossectomy+Mrnd | 1 | 0.99% |
| IDL + Biopsy | 6 | 5.94% |
| ECA Ligation | 3 | 2.97% |
| Near Glossectomy +MRND | 1 | 0.99% |
| Hemi Glossectomy +MRND | 16 | 15.84% |
| Partial Glossectomy +MRND | 7 | 6.93% |
| Resection +MRND | 1 | 0.99% |
| Subtotal Glossectomy +MRND | 7 | 6.93% |
| Total Glossectomy+MRND | 20 | 19.80% |
| W ,SOHND | 5 | 4.95% |
| W+MRND | 34 | 33.66% |
| W+MRND+F | 5 | 4.95% |
| Total | 101 | 100.00% |

In most cases wide excision and reconstruction was possible (54 cases) near glossectomy with MRND was done in 1patient hemi glossectomy with MRND was done in 16 patient partial glossectomy with MRND was done in 17 patient.

All case were proved as Squamous cell carcinoma. the minimum follow up was for 13 months and at the last follow-up all cases were found to be tumour free.

## 4. Discussion

Recent data has suggested that an annual basis approximately three million new cases are noted and half of them succumb to the disease. [1,2]

Among all sites withinthe oral cavity the cancer of the tongue holds a special place and most often is described as a separate clinical entity. [3,4]

It is estimated that oral malignancies most often affect those countries that have low and middle income, and 50% of threes cancers occur in the South East Asian countries particularly in the Indian subcontinent. India is holds a top position in the epidemiology of oral cancers and accounts for one-fifth of all the cancers of the oral cavity. When the mortality rates are compared 25% of all the death due to oral cavity disease occur in the Indian continent. [4,5]

One of the major contributory factors for the development of cancer is tobacco chewing [(6)]. The other risk factors that contribute in the pathogenesis of oral cancers are consumption of alcohol in very high amounts, infections

specially HPV, sharp tooth, sexually transmitted diseases, chronic inflammatory conditions of the tongue.[6,7]

Oral cancer though occurs across all socio economic groups, it seems to occur in a higher rate in the those who have a lower socio- economic status.[6]

Oral cancer has a long preclinical phase that consists of well-documented precancerous lesions. The precancerous lesions include homogeneous leukoplakia, nonhomogeneous leukoplakia, verrucous leukoplakia, erythroplakia, OSMF, lichen planus, and chronic traumatic ulcers.[8] Visual screening of the oral cavity has been widely evaluated for its feasibility, safety, acceptability, accuracy to detect oral precancerous lesions and cancer, and efficacy and cost-effectiveness in reducing oral cancer mortality.[9]

The recent changes and the understanding of the pathological process that are involved in the disease process have paved a way to discover newer modalities in the treatment of cancer. In cancer of the tongue, surgery remains the most important modality in the treatment management. The mainstay of current therapy for oral cancer is surgery and radiation treatment.[3,4]

The present day thought is that the best modality of management in each case needs to be individualized with expert opinion from various branches of oncology and allied people.

It is suggested that the cases need to be studied thoroughly by a team of experts that include competent individuals from the field of pathology, radiology, surgery, radiation oncology and medical oncology.[10] All these individuals collective make up the reviewed by a tumour boards. The choice of modality depends on the location of the tumour, cosmetic and functional outcomes, age of the patient, associated illnesses, patient's preference, and the availability of expertise.

Most early-stage oral cancers can be locally excised or treated with radiotherapy, with no or minimal functional and physical morbidity. Elective neck dissection to remove lymph nodes may be considered in selected cases, such as patients with stage I tongue cancer and stage II cancers at other oral sites, who may be at high risk of microscopic but not clinically evident involvement of the neck nodes (N0).[11]

Locally advanced tumours are aggressive, and loco regional treatment failure rates are high. A combined modality approach integrating surgery, radiotherapy with or without chemotherapy, and planned and executed by a multidisciplinary team is always preferred.[12,13]

## 5. Conclusions

The mainstay of current. Exciting challenges include improving success rates of current therapy, reducing the morbidity of treatment, and to select the most appropriate treatment.

## 6. Source of Funding

None.

## 7. Conflict of Interest

None.

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