Clinical Outcome of Surgical Management in Oral Carcinoma

Authors

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Abstract

Background: The oral cavity is composed of seven sub-sites, namely the lip, oral tongue, alveolar ridge, retromolar trigone, floor of mouth, buccal mucosa, and hard palate. Fifteenth most common malignancy according to the WHO. Oral cancer is predominantly a disease of middle age. Patients generally present in advanced stage, when early oral cancer is identified survival rates are comparatively greater. The present study aims to evaluate the various age, stage of presentation of carcinoma oral cavity, treatment strategies and the associated morbidity and mortality.

Materials and Methods: A prospective study was conducted on 20 patients of carcinoma oral cavity in the Department of General Surgery, Andhra medical college, King George Hospital, Visakhapatnam from March 2017 to March 2018. Patients presenting with symptoms suggestive of oral cancer were admitted, examined, investigated using CT, and operated during this period. Factors studied were, epidemiology and risk factors, mode of presentation, edge biopsy, CT findings, treatment, associated morbidity and mortality.

Results: Of the 20 patients studied 16 were male and 4 were female, most common age group being 40-50 years. Ulcers and growths were the most common modes of presentation. Most common site was the Buccal mucosa and Tongue presented in stage 2 and 3. Survival was related to age, T Stage, and N Stage. The 5-year survival was 62 percent. Most common histopathology was squamous cell carcinoma.

Conclusion: Rural people and low socioeconomic people should be well educated about risk factors which drastically reduces incidence of oral cancers.

Keywords: Ca oral, Edge biopsy, squamous cell carcinoma.

Introduction

Oral cancer (OC) is a significant cause of morbidity and mortality worldwide. Carcinoma oral cavity is the 15th most diagnosed cancer according to WHO.

The most important risk factors are alcohol and tobacco consumption for intraoral cancer and sun exposure for lip cancer in those who work outdoors. The incidence of tongue and other intraoral cancer for woman can be greater or equal to that of men in high incidence areas such as India where chewing tobacco is also common among women.
2017. Patients presenting with symptoms suggestive of oral cancer were admitted, examined, investigated using Edge biopsy, CT, and operated during this period. Factors studied were epidemiology and risk factors, mode of presentation, edge biopsy findings, CT findings and treatment.

**Inclusion Criteria**

1) Males and females in age group ranging from 20-75yrs.
2) Patients with oral cancer confirmed on histopathology were included in the study.

**Exclusion Criteria**

1) Patients who did not consent for the study.
2) Patients below the age group 20 and above 75 years.
3) Patients diagnosed with apthous ulcers and benign leukoplakia were excluded.
4) Co-morbid conditions like cardiac disease and renal failure.

**Results**

**Age wise distribution**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-20YRS</td>
<td>1</td>
</tr>
<tr>
<td>20-30YRS</td>
<td>1</td>
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<tr>
<td>30-40YRS</td>
<td>5</td>
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<tr>
<td>40-50YRS</td>
<td>10</td>
</tr>
<tr>
<td>50-60YRS</td>
<td>4</td>
</tr>
<tr>
<td>60-70YRS</td>
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</tr>
</tbody>
</table>

**Gender Distribution**

Males-16, Females-4

**Etiological factors**

<table>
<thead>
<tr>
<th>Etiological factors</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>smoking</td>
<td>17</td>
</tr>
<tr>
<td>alcohol</td>
<td>14</td>
</tr>
<tr>
<td>Betel quid chewing</td>
<td>17</td>
</tr>
<tr>
<td>non smoker &amp; non alcoholic</td>
<td>3</td>
</tr>
<tr>
<td>viruses</td>
<td>10</td>
</tr>
<tr>
<td>nutritional deficiency</td>
<td>12</td>
</tr>
</tbody>
</table>
Site of presentation
Lip-1,
oral tongue-2,
alveolar ridge-0
retromolar trigone-1
floor of mouth-2,
buccal mucosa-14
hard palate-0

Clinical features
Ulcer-12,
Pain-6,
Halitosis-10,
Involvement of Retromolar trigone-2,
Trismus-0,
Dysphagia-8,
Lymph nodal involvement-10

Stage of presentation
Stage 1-2
stage 2-10
stage 3-6
stage 4-2

Treatment
Curative resection was possible in 18 patients as
wide local excision, Hemimandibulectomy along
with neck lymphnode block dissection followed
by adjuvant radiotherapy.
Palliative chemotherapy and Radiotherapy was
given to 2 patients (53.3%) patients.

Histology type
1) Surface epithelium-20
   - squamous cell carcinoma-19
   - Basal cell carcinoma-1
   - Malignant Melanoma
2) Glandular epithelium-0
   - adenocarcinoma
   - mucoepidermoid
   - adenoid cystic carcinoma
   - acinic cell carcinoma
   - undifferentiated carcinoma
3) Mesenchymal tissues-0
   - lymphomas, sarcomas

Histology Grading
Well Differentiated-11
Moderately differentiated-9
Poorly differentiated-1
Very poorly differentiated-0

Clinical outcome
- completely cured-18
- death-0
- Recurrences-2

Discussion
Worldwide 6th m/c cancer. Cancer of oral cavity is
not an uncommon disease.
In males-it is third m/c after lung and prostate. In
females-it is second following Breast cancer.
The oral cavity is composed of seven sub-sites,
namely the lip, oral tongue, alveolar ridge,
retromolar trigone, floor of mouth, buccal mucosa,
and hard palate.
Spectrum of malignant tumors to affect the oral cavity vary widely and includes:
1) Surface epithelium
   - squamous cell carcinoma over 90%
     (undifferentiated, differentiated, adenoid squamous, verrucous)
   - Basal cell carcinoma
   - Malignant Melanoma
2) Glandular epithelium
   - adenocarcinoma in females,
   - mucoepidermoid carcinoma in males
   - adenoid cystic carcinoma
   - acinic cell carcinoma
   - undifferentiated carcinoma
3) Mesenchymal tissues
   - lymphomas, sarcomas are very rare.

Overall survival rate for oral cancer in general population is 52% which is worse than prostate, uterine, breast, bladder, cervical and colon cancers. 5yr survival rate is 34%. With early detection and treatment 5yr survival rate can increase up to 85%. Even though oral cancer is typically a disease of older people (60-70), usually because of their longer exposure to risk factors, it does occur in younger individuals.

**Conclusion**
Increasing the awareness regarding etiology and varied clinical presentation is needed for early detection. Rural people and low socioeconomic people should be well educated about risk factors which drastically reduces incidence of oral cancers. 40-50yrs age group is at more risk. Betel quid chewing and smoking are main risk factors. Majority are well differentiated carcinoma at the time of presentation.

**References**