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Short communication

Outcome of tongue cancer and early diagnosis

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Abstract

Back ground and Objective: Oral cancer is primarily a disease of epithelial origin. The tongue is the most common site of oral cancer. The aim of this study was to determine the frequency of tongue cancer and signs, symptoms, clinical features, and site of lesions in addition to factors affected this cancer.

Patients and Materials: Twenty eight medical records of patients who admitted for tongue cancer in head and neck surgery department, Ahvaz, Iran, during 2003-2007 years, were analyzed. Information included: age, gender, diagnosis time, lesion site, treatment and lymph node involvement.

Results: The most patients (78.6%) were above 40 years, male were (72.2%) and female were (75%) in the above 40 years group. The most common lesion site was shown in Table 1. The median time from symptom presentation to diagnosis was 5.21 months. Early stage (I, II) and late stage (III, IV) were seen in (39.3%) and (60.7%) of patients. Primary lesion resection was performed for all of the patients and 16 cases (57.1%) underwent hemi or total glossectomy and neck dissection. Recurrence was seen in seven cases (25%). Finally, in patients followed up, three cases dead after 6-7 years.

Conclusion: Gender does not influence prognosis in patients with oral tongue cancer, and in our study there was no correlation between sex and locoregional metastasis, thus on prognosis. Sixty-seven percent of patients were stage III and IV. In one study, 55% of patients were stage III and IV (16) that was lower and in the other study there were (78.8%) that was higher (15,16) than this study.

Keywords: Tongue cancer; Early diagnosis; locoregional metastasis

Introduction

Oral cancer is primarily a disease of epithelial origin. The tongue is the most common site of oral cancer¹. Despite recent advances in diagnosis and treatment, overall survival of people with squamous cell carcinomas of the tongue and mouth floor continues to be low. Prognostic information is essential for improved evaluation and treatment². Oral cavity cancer is predominantly a disease of middle-aged men who use tobacco and alcohol. Nearly 95% of carcinomas occur after the age of 45, with an average age of approximately 60 years. In recent years, oral

cavity cancers have increased at a younger age, especially in females who never consumed alcohol or smoked³. Young patients with squamous cell carcinoma (SCC) of the oral tongue developed fewer locoregional recurrences. The overall survival and disease-specific survival rates were better in the young patient population⁴. Carcinoma of the tongue is the second most common malignancy of the oral cavity, predominantly affecting males in the sixth and seventh decades of life. The risk factors for this disease (primarily tobacco and ethanol abuse) are well documented in the literature. The current five-year survival for a T1 lesion without nodal involvement is

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approximately 80%. Over the past 10 years a group of younger patients (less than 40 years) has been identified⁵. There is an increasing risk of cervical lymph node metastases as tumor thickness increases in patients with anterior tongue squamous cell carcinoma (SCC). The role of elective neck treatment in early anterior tongue cancer is unclear⁶. The most important determinant of poor prognosis is an advanced disease stage at diagnosis⁷. However, alcohol and tobacco are two of the most important risk factors for development of oral squamous cell carcinoma. The consumption of alcohol and tobacco is closely associated not only with the development of oral cancer, but also with the course of the disease and this consumption is associated with a poor prognosis⁸. The etiology of head and neck cancer is multi-factorial. genetic, environmental, social and behavioral effects may all be implicated⁹. The aim of this study was to determine the frequency of tongue cancer and signs, symptoms, clinical features, and site of lesions in addition to factors affected this cancer.

Patients and Methods

Twenty eight medical records of patients who admitted for tongue cancer in head and neck surgery department, Ahvaz, Iran, during 2003-2007 years, were analyzed. Information included: age, gender, diagnosis time, lesion site, Treatment and lymph node involvement.

Results

Out of 28 patients treated for tongue cancer, 18 (57.2%) cases were male and 12(42.8%) were female. Male/female ratio was 1.5/1. The age of the patients was between 23-85 years. The mean age of patients was 54.3 years. The most patients (78.6%) were above 40 years, male were (72.2%) and female were (75%) in above 40 years group. The most common lesion site was shown in Table 1. All of the smokers (28.5%) were male and no consumption of alcohol was seen. Total lesions were squamous cell carcinoma. All of the smokers (28.5%) were male. The median time from symptoms presentation to diagnosis was 5.21 month. Cervical lymphadenopathy was the first presentation of tongue cancer in 2 cases (7.1%). The other sign and symptoms were pain, bleeding, sore and tongue ulcer and trismus. At diagnosis time, 17 cases (60.7%) had cervical lymphadenopathy. The most common site of node involvement was the submandibular area (41.1%) follow by upper and mid jugular (23.5%) and sub mental area (11.7%). The median size of tongue lesion was 21.9 mm. Early stage (I, II) and late stage (III, IV)

were seen in (39.3%) and (60.7%) of patients. Primary lesion resection was performed for all of the patients and 16 cases (57.1%) underwent hemi or total glossectomy and neck dissection. Recurrence was seen in 7 cases (25%). Finally, in patients followed up, 3 cases dead after 6-7 years.

Discussion

In our study, the average age of patients was 54.3 years (male= 48.5 y, female= 54.8 y), that was compatible with the study performed in Brazil¹⁰. From 28 patients treated for tongue cancer, 18 (57.2%) cases were male and 12(42.8%) were female and the male: female ratio was 1.5:1 that similar to several study^{10, 12-15}. The most common site of the lesion was lateral tongue (89.2%) that was higher than that reported in Finland¹¹, and almost similar to a study that was (75%)¹⁵. The most patients (78.6%) were above 40 years, male were (72.2%) and female were (75%) in above 40 years group. There was no significant difference between age and locoregional metastasis and recurrence. It was differ from the study show that Rates of locoregional recurrence and distant metastasis were higher in the older patients¹⁵. Gender does not influence prognosis in patients with oral tongue cancer¹⁵, and in our study there was no correlation between sex and locoregional metastasis, thus on prognosis. Sixty-seven percent of patients were stage III and IV. In one study, 55% of patients were stage III and IV (16) that was lower and in the other study there were (78.8%) that was higher(15,16) than this study.

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