

Clinical-epidemiological Behavior of Oral Cancer in the Province of Guantánamo, 2007 - 2018

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Abstract: Introduction: Oral cancer is a health problem that affects a significant group of people. Objective: To identify the clinical-epidemiological behavior of oral cancer in the province of Guantánamo in the period of 2007 - 2018. Method: A descriptive and cross-sectional study was carried out. The sample consists of 252 patients diagnosed with this disease by histopathology. The following variables were studied: triennial involvement, age, sex, origin, oral topography, clinical extension and morphological type. Results: The highest percentage of patients were male (69.4%), over 60 years of age (69.8%), from the municipality of Guantánamo (42.9%). The lesions were located mainly in the tongue (37.3%) and floor of the mouth (19.0%) and extended to the oral complex. Squamous cell carcinoma was the most common histopathological type (94%). Conclusions: In Guantánamo, oral cancer is an unsolved health problem that mainly affects the geriatric population and the male sex, which requires attention in advanced stages of the disease.

Key words: oral cancer; squamous cell carcinoma; stomatology

1. Introduction

Cancer is one of the leading causes of mortality in the world. Population estimates indicate that the number of new cases will increase over the next two decades, reaching 29.5 million in 2040. [1, 2] In this field, in the context of stomatology sciences, oral cancer is identified as a health problem due to its high incidence (It is the sixth most common type of cancer and the fourth type with the highest incidence in males.) and lethality [3] and its impact on the life quality of the affected people and their families. In Cuba, in 2017 it was the sixth leading cause of death from malignant tumors. [4]

Publications on the subject by Cuban [5, 6, 7, 8, 9, 10, 11] and foreign authors [12] offer relevance to the study of oral cancer. However, the authors did not find that any information on this health problem had been socialized in Guantánamo in the period of 2007-2018, so the objective of this article was to characterize clinical and epidemiological aspects of oral cancer in this period.

2. Method

A descriptive, retrospective and cross-sectional study was performed. The sample consisted of all patients with histopathological diagnosis of the disease (N = 252). Data were obtained from medical records and the provincial cancer

registry.

The following variables were studied: involvement by triennia, age, sex, origin, oral topography and histopathological type of cancer and clinical extension. The data were summarized by absolute and relative frequencies and expressed in tables.

3. Results

Table 1 shows that in the study period, oral cancer showed an oscillating trend, although the highest incidence was recorded in the three-year period 2010 - 2012.

Table 1. Patients according to frequency of oral cancer in Guantánamo Province in the period of 2007-2018

Period	No.	%
2007 - 2009	51	20.2
2010 - 2012	80	31.8
2013 - 2015	62	24.6
2016 - 2018	59	23.4
Total	252	100.0

Table 2 shows that the most affected patients were men (69.4%) and those aged 60 years or older (69.8%).

Table 2. Oral cancer patients by age and sex

Age groups	Sex				Total	
	Female		Male			
	No.	%	No.	%	No.	%
Less than or equal to 20	1	0.4	-	-	1	0.4
21-34	-	-	2	0.8	2	0.8
35-59	21	8.3	52	20.6	73	29.0
60+	55	21.8	121	48.1	176	69.8
Total	77	30.5	175	69.5	252	100.0

Table 3 shows that the frequency of oral cancer was higher in patients from the municipalities of Guantánamo (42.9%) and Baracoa (24.2%).

Table 3. Patients with oral cancer by origin

Municipalities	No.	%
Guantánamo	108	42.9
Baracoa	61	24.2
Maisi	21	8.3
El Salvador	17	6.7
San Antonio del Sur	13	5.1
Imias	12	4.8
Manuel Tames	6	2.4
Yateras	6	2.4
Niceto perez	5	2.0
Caimanera	3	1.2

Table 4 reveals that oral cancer was located more at the level of the tongue (37.3%), and the most common histopathological type of cancer was squamous cell carcinoma (94.4 %).

Table 4. Patients according to localization and histopathologic type of oral cancer

Oral topography	Histopathological type of cancer				Total	
	Epidermoid carcinoma		Other malignant neoplasms			
	No.	%	No.	%	No.	%
Tongue	90	35.7	4	1.6	94	37.3
Floor of the mouth	47	18.7	1	0.4	48	19.0
Hard and soft palate	40	15.9	3	1.2	43	17.1
Other parts of the mouth	21	8.3	3	1.2	24	9.5
Lips	18	7.1	1	0.4	19	7.5
Retromolar space	10	4.0	1	0.4	11	4.4
Gums	5	2.0	-	-	5	2.0
Cheek mucosa	2	0.8	2	0.8	4	1.6
Vestibule of the mouth	4	1.6	-	-	4	1.6
Total	237	94	15	6	252	100.0

Regarding clinical extension, oral cancer was located in the oral complex (52.8%), as shown in Table 5.

Table 5. Patients according to clinical extent of oral cancer

Clinical extension	No.	%
Located in the oral complex	133	52.8
Direct and regional lymphatic extension	48	19.0
Direct extension	44	17.5
Regional lymphatics	21	8.3
Remote metastasis	5	2.0
On site	1	2.0
Total	252	100.0

4. Discussion

The rising trend of the incidence rate of oral cancer is a worldwide reality [2], which is also revealed in Cuba [4] and Guantánamo. [7-10] International studies reflect a high incidence of this disease in Africa. [12-13] In Cuba, this disease is among the four most common types of cancer, especially in men, according to studies carried out in the provinces of Holguín, Las Tunas and Guantánamo. [4-10]

It was suggested that the health problem posed by oral cancer is determined by a variety of factors, including the influence of toxic habits, such as smoking and alcoholism [1, 3], increasing age, and inadequacies in the perception of the risk of oral cancer in the population.

Perhaps from the above comments, as pointed out by other researchers [2, 12-13], oral cancer is more common in men, because there is evidence that their smoking habits and alcohol consumption are higher [1, 3], and they usually do not seek oral evaluation that can early diagnose precancerous lesions of oral cancer and promote oral health. In fact, the biological tendency of this cancer in both sexes has not been confirmed, and people believe that it is the way they act that makes them more susceptible to contracting men.

The results of this study are in harmony with those of other authors [2, 10, 12-14] who report that oral cancer is more common in the sixth decade of life. The risk of cancer increases with age, as the longer period of exposure to factors related to the genesis of cancer increases, thus increasing the patient's vulnerability to cancer.

The fact that the highest percentage of the patients included in this study came from the Guantánamo municipality is similar to the observations of other researchers [11, 12] who agree that oral cancer is more frequent in patients from urban areas, which seems to be related to the possibility of these patients and their culture of seeking stomatological help, which makes early diagnosis possible.

According to the oral topography, the results presented are consistent with those reported in national and foreign studies, in which squamous cell cancer affects the tongue, being the most frequent oral cancer. [15, 16-17] It is worth mentioning that the number of patients with oral cancer on the floor of the mouth, which differs from international studies reflect the gingiva and lip as the second anatomical location. [14-15] The scientific literature shows that squamous cell carcinoma is the most common morphological type of oral cancer [3, 5, 6, 12, 17, 18, 19], which supports the results presented.

The study of the clinical extent at the time of diagnosis of patients with oral cancer is a prognostic factor of this disease. [13, 11, 19] Research shows that most patients come for treatment or are diagnosed in advanced stages of the disease, which makes the prognosis unfavorable. [11, 13, 20-21]

It was concluded that in the province of Guantanamo, oral cancer showed an oscillating trend in the period 2007-2018, it was more common in men and in patients aged 60 or older, of urban origin, it was located mainly in the tongue and squamous cell carcinoma was the most common histopathological type.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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