

Clinical-epidemiological behavior of oral cancer in the province of Guantánamo, 2007-2018

Nuria Pérez Delgado¹, Eduardo Urgellés Rodríguez², Lisandra González Torres²

1. "Dr. Agostinho Neto" General Teaching Hospital. Guantánamo, Cuba

2. University Polyclinic. Guantánamo, Cuba

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 2007-2018 period. Method: a descriptive, cross-sectional study was carried out. The universe was the 252 patients with histopathological diagnosis of the disease. The following variables were studied: triennial involvement, age, sex, origin, oral topography, clinical extension and morphological type. Results: the highest percentage of the patients belonged to the male sex (69.4%), were over 60 years old (69.8%), came from the Guantánamo municipality (42.9%). The lesions were located mainly in the tongue (37.3%) and floor of the mouth (19.0%) and extended to the buccal complex (52.8%). 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 death worldwide. Population estimates indicate that the number of new cases will increase over the next two decades, reaching 29.5 million by 2040 [1,2]. In this field, within the context of stomatological 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 most common among men) and mortality rate [3] as well as its impact on the quality of life of those affected and their families.

In Cuba, in 2017, it was the sixth leading cause of death from malignant tumors [4].

Publications on this topic by Cuban authors [5,6,7,8,9,10,11] and foreign authors [12] provide valuable insights for the study of oral cancer. However, the authors found no evidence that any information regarding this health issue had been disseminated in Guantánamo during the 2007–2018 period; therefore, the objective of this article was to characterize the clinical and epidemiological aspects of oral cancer during this period.

2 Method

A descriptive, retrospective, and cross-sectional study was conducted. The study population consisted of all patients with a histopathological diagnosis of the disease (N = 252).

Data were obtained from medical records and the provincial cancer registry.

The following variables were studied: incidence by three-year periods, age, sex, place of origin, oral topography, histopathological type of cancer, and clinical extent.

The data were summarized using absolute and relative frequencies and presented in tables.

3 Results

Table 1 shows that during the study period, oral cancer exhibited a fluctuating trend, although the highest incidence was recorded in the 2010–2012 period.

Table 1. Patients by incidence of oral cancer in Guantánamo Province during the 2007–2018 period

Three-Year 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.	%
≤ 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 incidence of oral cancer was higher among patients from the municipalities of Guantánamo (42.9%) and Baracoa (24.2%).

Table 3. Patients with oral cancer by municipality

Municipality	Number	Percentage
Guantánamo	108	42.9
Baracoa	61	24.2
Maisí	21	8.3
El Salvador	17	6.7
San Antonio del Sur	13	5.1
Imías	12	4.8
Manuel Tames	6	2.4
Yateras	6	2.4
Niceto Pérez	5	2
Caimanera	3	1.2

Table 4 shows that oral cancer was most commonly located on the tongue (37.3%), and the most common histopathological type of cancer was squamous cell carcinoma (94.4%).

Table 4. Patients by location and histopathological type of oral cancer

Oral Topography	Cancer Histopathological Type				Total	
	Squamous Cell Carcinoma		Other Malignant Neoplasms			
	No.	%	No.	%	No.	%
Tongue	90	35.7	4	1.6	94	37.3
Floor of Mouth	47	18.7	1	0.4	48	19
Hard and Soft Palate	40	15.9	3	1.2	43	17.1
Other Oral Sites	21	8.3	3	1.2	24	9.5
Lips	18	7.1	1	0.4	19	7.5
Retromolar Space	10	4	1	0.4	11	4.4
Gingivae / Gums	5	2	—	—	5	2
Buccal Mucosa	2	0.8	2	0.8	4	1.6
Oral Vestibule	4	1.6	—	—	4	1.6
Total	237	94	15	6	252	100

Regarding clinical extent, oral cancer was localized in the oral cavity (52.8%), as shown in Table 5.

Table 5. Patients by clinical stage of oral cancer

Clinical Extent	Number	Percentage
Confined to the oral cavity complex	133	52.8
Direct extension plus regional lymphatic spread	48	19
Direct extension	44	17.5
Regional lymphatic spread	21	8.3
Distant metastasis	5	2
In situ	1	2
Total	252	100

4 Discussion

The trend toward an increase in the incidence of oral cancer is a global reality[2] , which is also evident in Cuba [4] and in Guantánamo [7-10]. International studies show a high incidence of this disease in Africa [12-13]. In Cuba, this disease ranks among the four most common types of cancer, particularly in men, according to studies conducted 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 harmful habits such as smoking and alcoholism [1,3] , advancing age, and the population's insufficient awareness of the risk of oral cancer.

Perhaps due to the above observations, oral cancer is more common in men, as other researchers have noted [2,12-13], as it is documented that smoking and alcohol consumption are higher among men [1,3] and they generally do not seek dental evaluations that would enable the early diagnosis of premalignant oral cancer lesions and promote oral health. In fact, in both sexes, no biological predisposition to this type of cancer has been demonstrated, and it is thought that lifestyle factors are what make men more vulnerable.

The results of this study are consistent with those of other authors [2,10,12-14],who report that oral cancer is most common in the sixth decade of life. The risk of cancer increases with age, as the duration of exposure to factors associated with cancer development also increases, thereby heightening the patient's susceptibility to cancer.

The fact that the majority of patients included in this study were from the municipality of Guantánamo is consistent

with the observations of other researchers [11,12] who agree that oral cancer is more common in patients from urban areas, which appears to be related to their greater likelihood and cultural tendency to seek dental care, thereby enabling early diagnosis.

In terms of oral topography, the results presented here are consistent with those reported in national and international studies, in which squamous cell carcinoma of the tongue is the most common type of oral cancer [15,16,17]. It is worth noting the number of patients with oral cancer on the floor of the mouth, a finding that differs from international studies, which report the gingiva and lip as the second most common anatomical site [14-15]. The scientific literature indicates 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 here.

The assessment of clinical extent at the time of diagnosis in patients with oral cancer constitutes a prognostic factor for this disease [13,11,20]. Research indicates that most patients seek treatment or are diagnosed at advanced stages of the disease, resulting in an unfavorable prognosis [11,13,19-21].

5 Conclusion

It was concluded that in the province of Guantánamo, oral cancer showed a fluctuating trend during the 2007–2018 period; it was more common in men and in patients aged 60 years or older from urban areas; it was primarily located on 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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