Accredited No. 28/E/KPT/2019
p-ISSN: 1907-5987 e-ISSN: 2615-1790

RESEARCH ARTICLE

Prevalence of Patients with Oral Cavity Tumours at Hospital Abdoel Wahab Sjahranie Samarinda 2016-2020

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Online submission : 26 January 2022
Accept Submission : 15 February 2022

ABSTRACT

Background: *Tumour is an uncontrolled swelling of tissue. Tumour caused by uncontrolled proliferation abnormal tissue and cell. Based on the nature of the tumour, there are two types of tumours, that is benign tumour and malignant tumour. The malignant tumour can cause death while benign tumour only aggravate the surrounding tissue.The high incidence of tumors in various countries, including Indonesia, rarely finds research on the prevalence of oral tumors, especially in East Kalimantan, especially the capital city of Samarinda.* ***Objective:*** *This research is to find out the incidence of oral cavity tumour at RSUD Abdoel Wahab Sjahranie periode 2016-2020 .* ***Methods:*** *Used was a descriptive observational method retrieving secondary data in the form of medical records. The sampling method used in this research was the purposive sampling method.* ***Results:*** *the profile of patients with oral cavity tumour at Regional General Hospital Abdoel Wahab Sjahranie 2016-2020 are as follows the age group with the highest incidence is 46-55 years: 32 patients (24,8%), The highest incidence by gender were women: 78 patients (60.5%) and man: 51 patients (39,5%). Most of the tumour were found in the mandible: 65 patients (50,4%).* ***Conclusion:*** *The prevalence of oral cavity tumour is higher in female patients than male patients.*

Keywords: *Oral Cavity, Benign Tumour, Malignant Tumour*

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Denta Jurnal Kedokteran Gigi, Februari 2022; Vol.16 No.1; Hal 21-25
Available at http://journal-denta.hangtuah.ac.id/index.php/jurnal/issue/view/18
DOI: 10.30649/denta.v16i1.4

INTRODUCTION

Dental and oral health can be classified as good if it affects the quality of each individual who has a large enough role, such as preparing food substances as nutrients in the digestive tract, as well as aesthetic and speech functions.[1] However, there are still some people who do not care about maintaining oral health so it causes various types of diseases or systemic disorders and manifests in the body because the oral cavity is very vulnerable to trauma from exposure to intrinsic or extrinsic factors.[2] If people do not realize and detect this, it will become one of the problems of malignancy of dental and oral diseases, namely tumors in the oral cavity.[1]

The tumor is abnormal tissue that grows continuously in excess and cannot be coordinated from normal tissue. Based on the nature of the tumor is divided into two, namely benign tumors and malignant tumors.[3] Malignant tumors have the highest prevalence and can occur about 2% of all cases of malignancy in various countries and continue to increase with age up to over 50 years. [3,4]

In a study in Nigeria, the prevalence of benign tumors in the oral cavity was around 36.3% with the most dominant cases in the mandibular region[5] and occurring in both men and women.[6] Patients with tumors are greater in men than women because oral cavity tumors have multifactorial causes, but the factors suspected of being the main cause are the use of alcohol and cigarettes dominated by men.[7] Then, other factors occur due to intrinsic factors which are usually associated with heredity and growth factors, while extrinsic factors are about 50% in Asia, such as tobacco cigarettes and chewing betel nut[8,9.]

The growth of benign tumors is different from malignant tumors which can cause death. The malignancy of oral cancer in America can cause one human to die within an hour because the cancer is easy to spread and the treatment is delayed due to a lack of public awareness of early cancer screening[3,7]. Research on benign tumors rarely causes death, because of slow growth and some are fast. However, indirectly some cases of benign tumors can interfere with the vital structures of the body around it.[10]

Benign tumors and malignant tumors are very important in determining the right type of treatment or therapy, one of which is to determine the malignancy of tumor cells through the degree of differentiation determined from microscopic assessment of tumor cell morphology that resembles normal cells.[7] Based on this, researchers are interested in conducting research to determine the profile and distribution of patients with oral tumors at Abdoel Wahab Sjahranie Hospital Samarinda from 2016-2020 based on tumor classification, age, gender, tumor location, and the degree of tumor differentiation.

MATERIALS AND METHODS

This research method is descriptive observational research using secondary data from medical records. This research was conducted at the Medical Record Installation and Anatomical Pathology Laboratory of the Abdoel Wahab Sjahranie Hospital, Samarinda. The population of this study were all patients with a diagnosis of oral cavity tumors based on the results of Anatomical Pathology at the Abdoel Wahab Sjahranie Hospital in 2016-2020.

The sample in this study were patients with a diagnosis of oral cavity tumors based on the results of Anatomical Pathology at the Abdoel Wahab Sjahranie Hospital in 2016-2020 who met the inclusion criteria that had been set. The sampling technique in this study used a purposive sampling technique. The inclusion criteria in the study were all patients who were registered as inpatients, diagnosed patients who had undergone examinations in the histopathology laboratory, and patients who had medical record data at the Medical Record and Pathology Installation of RSUD Abdoel Wahab Sjahranie between 2016- 2020. The exclusion criteria were patients with incomplete medical record.

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RESULTS

This research was carried out through medical record data and the conclusions of Anatomical Pathology at the Abdoel Wahab Sjahranie Hospital in 2016-2020 getting 129 samples with the following results:

From these data, it was found that patients with the highest oral cavity tumor were in the age category 46-55 years with 32 patients (24.8%), while the lowest was at the age of 12-16 years with 7 patients (5.4%). Both benign tumors and malignant tumors occupy the most age category is 46-65 years. Based on the classification of tumors in the 12-16 year age group, 7 patients had benign tumors and there were no patients with malignant tumors. The age group of 17-25 years consisted of 6 patients with benign tumors and 4 patients with malignant tumors. The age group of 26-35 years consisted of 10 patients with benign tumors and 5 patients with malignant tumors. The age group of 36-45 years consisted of 14 patients with benign tumors and 9 patients with malignant tumors. The 46-55 year age group consisted of 17 patients with benign tumors and 15 patients with malignant tumors. The 56-65 year age group consisted of 9 patients with benign tumors and 22 patients with malignant tumors. Age group >65 years as many as 1 patient with benign tumor and 10 patients with a malignant tumor.

Table 1. Characteristics of Patients with Oral Cavity Tumors by Age

Age	Benign Tumor	Malignant Tumor	Total	%
12–16	7	0	7	5,4
17–25	6	4	10	7,8
26–35	10	5	15	11,6
36–45	14	9	23	17,8
46–55	17	15	32	24,8
56–65	9	22	31	24
>65	1	10	11	8,5
Total	64	65	129	100

Table 2. Characteristics of Patients with Oral Cavity Tumors by Gender

Gender	Benign Tumor	Malignant Tumor	Total
Male	20	31	51
Female	44	34	78
Total	64	65	129

From these data, it was found that patients with the highest oral cavity tumors were women, 78 patients of whom 44 were benign oral tumors and 34 patients were oral malignant tumors, while 51 patients were male, of which 20 patients were benign oral tumors. and 31 patients were malignant tumors of the oral cavity.

Table 3. Characteristics of Patients with Oral Cavity Tumors Based on Location

Location Tumor	Benign	Malign-ant	Total	%
Maxilla	19	9	28	24,8
Mandible	29	36	65	50,4
Other locations (gingiva & labia)	8	12	20	15,5
No location information	8	4	12	9,3
Total	64	65	129	100

In table 3, it is found that oral cavity tumors with the highest location were the mandible as many as 65 patients (50.4%), maxilla as many as 28 patients (24.8%), other locations such as gingiva and labia as many as 20 patients (15.5%) and there is no location information in the medical records of 12 patients (9.3%).

DISCUSSION

Characteristics of Patients with Oral Cavity Tumors Based on Age

Table 1 shows that the age range of patients with oral cavity tumors is early teens 12-16 years to seniors >65 years. Previous research also found that the age range of patients with oral cavity tumors was >80 years. Then the age with the highest incidence in patients with oral cavity

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tumors was in the early elderly group (46-55 years) as many as 32 patients (24.8%) and the late elderly (56-65 years) as many as 31 patients (24.0%). oral cavity tumors. Meanwhile, the lowest age of incidence was in the early adolescent age group 12-16 years as many as 7 patients (5.4%).

This study found that the age group of patients with benign oral tumors in the 46-55 year group was 17 patients. The results of a study conducted by Kanaco in Manado with the highest prevalence of age group occurring in the age group that has reached 41-50 years.[3] Cases of benign tumors in that age group were Ameloblastoma, a study conducted by Rusdiana et al., in 2011 obtained the results of Ameloblastoma occurring at the Jakarta Hospital in the age group of 31-50 years and was recognized by the analysis conducted by Small and Waldron (1955) and Mehlisch , Dahlin and Masson (1972) from 1036 cases said cases of ameloblastoma often occur in patients aged 20-50 years.[11]

The age group of patients with malignant tumors of the oral cavity was mostly in the group of 56-65 years as many as 22 patients. Other studies say that malignancy in tumors occurs in the 40-59 year age group, this is in line with research that has been done. The incidence of malignancy can occur due to the influence of behavioral factors, environmental factors, poor lifestyle, or exposure to carcinogenic substances at a young age that has been exposed for a long period, the longer the patient's immune system will weaken.[4]

Characteristics of Patients with Oral Cavity Tumors by Gender

Table 2 found that the sex of most patients with oral cavity tumors was female as many as 79 patients (60.3%), while the sex was male as many as 52 patients (39.7%). Benign tumors of the oral cavity by sex which have the highest incidence are women with 44 patients compared to men with 20 patients and malignant tumors of the cavity that have the highest incidence are women with 34 patients compared to men with 31 patients. The higher incidence in women was due to the risk of tumor recurrence, which is dominated by women.[12] This is in contrast to other studies which state that tumors or cancer of the oral cavity are more common in men with the highest frequency in various countries, due to risk factors for smoking and alcohol.[7]

Characteristics of Patients with Oral Cavity Tumors Based on Location It was found in table 3 that there were 65 patients (50.4%), maxilla as many as 32 patients (24.8%), other locations such as the gingiva and labia as many as 20 patients (15.5%), and there was no location information as many as 12 patients. (9.3%). According to previous studies, the location of the tumor greatly influences the severity of the patient's status because it can cause death if nodule metastases occur through the severity of the tumor at each location.[13]

Tumor sites include the lip, anterior two thirds of the tongue, gingiva, mandible, maxilla, retromolar third and palate. The most common areas where malignant tumors occur are the tongue (40%) and the floor of the mouth (33%) with the highest incidence of squamous cell carcinoma.[14] In the mandibular area about 80%, the most common benign tumor is ameloblastoma.[15] The mandible has the highest incidence because the initial tumor is through invasion of the mandible on the floor of the mouth, the ventral surface of the tongue and through the gingivobuccal sulcus.[16]

CONCLUSION

Based on the results of research that has been carried out, the prevalence of oral cavity tumour is higher in female patients than male patients in the Abdoel Wahab Sjahranie Hospital. This hospital is a national referral hospital located in East Kalimantan so that it could represents a fairly high distribution for the incidence of tumors and oral cancer in East Kalimantan.

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