Intraosseous Lesions of the Jaws: A Retrospective Review of Clinical Cases

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Abstract

Background. The aim of this study is to examine the distribution of 338 intraosseous lesions that have been surgically treated and histopathologically examined and to compare the findings with the literature.
Methods. A retrospective analysis was conducted on 338 pathologies that were surgically treated and histopathologically examined over an 18-month period in the second half of 2022 and throught 2023. The data obtained were evaluated in terms of age, gender, histopathological diagnosis, and localization.
Results. Out of the 338 lesions, 262 (77,5%) were odontogenic cysts. 4 pathologies (1,18%) were malignant. The most common age group was 36-60 years, comprising 149 patients (44,1%), followed by the 19-35 age group with 119 patients (35,2%). Of the patients, 197 (58,3%) were male and 141 (41,7%) were female. The most common lesion was the radicular cyst, with 129 lesions (38,2%), followed by the dentigerous cyst with 80 lesions (23,7%), and the odontogenic keratocyst with 45 lesions (13,3%). Out of the lesions, 221 (65,38%) were observed in the mandible, 112 (33,14%) in the maxilla, and 5 (1,48%) in both jaws.
Conclusions. Intrabony lesions observed in the jaw region have various etiologies and require careful clinical and radiological evaluation for accurate diagnosis and management. The study aims to shed light on the diagnostic processes of experts in dentistry and maxillofacial surgery and to assist in clinical approaches.

Key Words: Odontogenic Cyst, Oral Neoplasm, Oral Pathology

Introduction

The oral cavity, characterized by a highly complex structure in the head and neck region, comprises various structures such as jaws, teeth, the tongue, salivary glands, and the soft and hard palate.[1] The jawbones are anatomical regions where lesions of both odontogenic and non-odontogenic origin are frequently observed. These lesions can be inflammatory, developmental, neoplastic, or reactive. The oral and maxillofacial region is also exposed to numerous harmful agents and carcinogens.[2,3]

Lesions that develop in the jawbones can be either benign or malignant in nature. Although these pathologies may clinically and radiologically be similar, they are identified by different names based on the tissue of origin and their etiology. In principle, lesions originate either from odontogenic sources such as dental lamina, enamel organ or primarily from bone. The pathological response of cancellous and cortical bone can be manifested through either an osteolytic or osteoblastic reaction; hence, most lesions in the jaws can be classified as cystic or lytic in appearance, sclerotic, or a combination of these characteristics. In patients with intraosseous lesions in the jaws, clinical examination may reveal signs such as pain, swelling, fistula, lymphadenopathy, restricted mouth opening, tenderness on palpation, facial asymmetry, mobility and vitality loss in teeth associated with the lesion. Routine radiological examination using intraoral and extraoral direct radiographs can provide information regarding the localization, boundaries and size of the lesion, its relationship with the surrounding bone tissue, root resorption of teeth associated with the lesion, displacement and whether there is an impacted tooth within the lesion.[4] In contemporary practice, tomographic images that provide three-dimensional examination are widely utilized. These images not only offer insights into the pathology but also provide a detailed perspective on the surrounding structures and their relationships.[5] To accurately diagnose oral and maxillofacial lesions, it is essential to consider clinical and radiographic findings, and to examine them histopathologically using appropriate biopsy methods.[2,3] Radiologically, these lesions can appear as radiolucent, radiopaque, or mixed. Among the most frequently encountered lesions in the jawbones are odontogenic cysts, which present as radiolucent lesions. While odontogenic cysts typically appear as well-defined lesions on radiographs, some tumors, such as cystic ameloblastomas, can present similar radiographic characteristics, making differential diagnosis important. According to the 2017 classification by the World Health Organization (WHO), cysts are divided into odontogenic and non-odontogenic cysts. Odontogenic cysts are further categorized into two classes: developmental and inflammatory.[6] However, in the 2022 classification by the WHO, these distinctions have been eliminated, and all cysts have been consolidated under a single category.[7]

Another type of pathological lesion encountered in the jaws is tumors. Tumors are categorized based on their clinical course into two main types: benign and malignant tumors. Benign tumors grow slowly, whereas rapid growth is a significant characteristic of malignant tumors. The more frequent the mitosis, the faster the growth rate. Due to their slow growth, benign lesions can cause displacement of tooth roots and sometimes root resorption. Although they can appear similar to cysts radiographically, benign tumors often present a more multilocular appearance.[8]

Benign fibro-osseous lesions are reactive lesions characterized by the replacement of normal bone tissue with fibrous connective tissue and varying amounts of bone and cementum, which gradually mineralize. These lesions can manifest in various forms, such as developmental, reactive-dysplastic processes, or neoplasms. Depending on the characteristics and quantity of the tissue they contain, these lesions may appear radiolucent, mixed, or radiopaque on radiographs. They can have a well-defined appearance or may not be distinctly

distinguished from the surrounding bone tissue. For instance, fibrous dysplasia often presents as asymptomatic and may be incidentally discovered on radiographs. In contrast, ossifying fibroma may lead to expansion of the affected bone. All fibro-osseous lesions in the jaw and facial region represent variations of the same histological pattern. Therefore, detailed clinical and radiographic evaluation is crucial for differential diagnosis. This careful assessment helps in distinguishing among the types of fibro-osseous lesions and making an accurate diagnosis.[9]

Factors such as age and gender influence the distribution of these lesions.[4,10,11] The prevalence of lesions occurring in the jawbones also varies according to populations.[8] Knowing the type, frequency, and distribution of lesions not only enhances awareness of diseases and complications in populations but also guides dentists in approaching the lesions they may encounter in clinical settings and in directing them towards appropriate treatments.[13,14,15]

The studies on lesions of the jawbones in the literature provide comprehensive findings concerning both oral pathologies and cases across all age groups. However, the majority of published reports are designed to analyze only a specific lesion or disease, are restricted to a particular age group, or are based on surveys or clinical investigations without histological diagnoses. There are few studies that analyze all specimens submitted for histopathological examination. The aim of this study is to evaluate the pathological lesions observed and operated in jawbones in terms of age, gender, location, and histopathological diagnosis in the Oral and Maxillofacial Surgery Department of Ankara University Faculty of Dentistry during the second half of 2022 and throughout 2023.

Materials and Method

This study focuses on cases operated due to jawbone lesions and subsequently subjected to histopathological evaluation at the Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Ankara University. The study encompasses operations conducted over an 18-month period, during the second half of 2022 and throught 2023. The aim is to examine the distribution of diagnoses in terms of gender, age, localization and histopathologic diagnosis. Localizations are categorized in 3 regions for each bone in the maxilla and mandible, namely anterior, premolar and posterior regions, while taking age into consideration, it is categorized in 4 groups as 0-18, 19-35, 36-60 and 61+. To prevent the recurrence of cases, the data collected has been subjected to cross-verification.

Results

During the 18-month period covering the second half of 2022 and the year 2023, out of 16,452 patients who applied to the Oral and Maxillofacial Surgery Department of Ankara University Faculty of Dentistry, biopsy was taken from intraosseous lesions of 338 patients, and histopathological diagnoses were made. The distribution of age (table 1), gender (table 2), localization (table 3), and diagnosis (table 4) of the 338 patients included in our study is shown in the relevant tables. Of the lesions we obtained, 262 (77,5%) are odontogenic cysts, and 4 (1,18%) of all the pathologies are malignant. Within the study, 197 participants (58,3%) were male, while 141 participants (41,7%) were female.

Upon examining the data, it is observed that lesions are most prevalent in the age group of 36-60 years, accounting for 149 patients (44,1%). The second most affected group is that of

19-35 years, comprising 119 patients (35,2%). Lesions are least common in the 61+ age group (%7,4).

From the perspective of localization, the lesions in the study were most frequently observed in the posterior region of the mandible, accounting for 173 lesions (51,2%). This was followed by the anterior maxilla with 66 lesions (19,5%) and the anterior mandible with 44 lesions (13%).

From a diagnostic perspective, out of 338 lesions with a histopathological diagnosis, 129 cases (38,2%) are radicular cysts, followed by lesions, dentigerous cysts in 80 patients (23,7%) and odontogenic keratocysts in 45 patients (13,3%).

Of the 338 patients, the age group in which intraosseous lesions is most frequently observed is the 36-60 years group, comprising a total of 149 individuals. Among these patients, 91 (61,1% of the patients in the 36-60 years age group) are male, whereas 58 (38,9% of the patients in the 36-60 years age group) are female. The distribution for other age and gender groups is presented in Table 5.

The most frequently observed lesion was the radicular cyst in 129 patients. Of those diagnosed with this condition, 77 (59,7% of all patients diagnosed with radicular cysts) were male, while 52 (40,3% of all patients diagnosed with radicular cysts) were female. The distribution of other diagnoses by gender is presented in Table 6.

When examining the distribution of lesions across age groups in different locations (Table 7), it is noted that the most common site is the posterior mandible, with a total of 173 lesions. Of these patients, 23 (representing 13,3% of all patients with lesions in the posterior mandible) are aged between 0-18 years, 59 (representing 34,1%) are aged between 19-35 years, 78 (representing 45,1%) are aged between 36-60 years, and 13 (representing 7,5%) are aged 61 years and above.

When examining the age group distribution based on diagnosis (Table 8), the most frequently observed lesion is radicular cyst. Of the patients with radicular cyst, 9 individuals (7% of all patients with radicular cyst) belong to the 0-18 age group, 49 individuals (38% of all patients with radicular cyst) are in the 19-35 age group, 64 individuals (49.6% of all patients with radicular cyst) fall within the 36-60 age group, and 7 individuals (5,4% of all patients with radicular cyst) are in the 61+ age group.

Discussion

In this retrospective study, we examined the diagnosis, age, localization, and gender distribution of 338 intraosseous lesions that were histopathologically examined over an 18-month period spanning the second half of 2022 and all throught 2023.

In our study, 262 out of the 338 lesions (77.5%) were odontogenic cysts. In the study conducted by Rafael et al.[16], 507 (%9,94) out of 5100 pathology specimens collected over a 15-year period were identified as odontogenic cysts. Similarly, in the study by Lorenzo et al.[17], 1970 (%97,04) out of 2030 lesions collected over a 39-year period were diagnosed as odontogenic cysts. Based on the literature and our study, it can be inferred that the majority of lesions occurring in the oral region are odontogenic in origin.

The study conducted by Negin et al.[18] examined 1603 odontogenic cysts. The findings showed that 35,12% were radicular cysts, 25,77% were dentigerous cysts, and 22,58% were odontogenic keratocysts. In the study conducted by Jones and Franklin[19], 53,4% of 6052 odontogenic cysts were identified as radicular cysts, 17,9% as dentigerous cysts, and 9,8% as

odontogenic keratocysts. In alignment with the literature, our study found that 39,6% of the diagnosed odontogenic cysts were radicular cysts, 23,7% were dentigerous cysts, and 13,3% were odontogenic keratocysts. Merva et al.[20] found that 52.09% of the diagnosed odontogenic cysts were radicular cysts, while 20.06% were odontogenic cysts and 10,39% were dentigerous cysts. Accordingly, they concluded that odontogenic keratocysts are observed more frequently than dentigerous cysts. The prevalence of radicular cysts being the most frequently observed cyst may be considered a result of an increased number of neglected dental caries.

Among the lesions only 4 cases (1,18%) were malignant. It is considered that the reason for the low occurrence of malignant pathologies compared to benign cases is that such patients more frequently present to other departments such as otolaryngology, plastic surgery, and similar specialties.

In terms of gender, 58,3% of the cases in our study were male. Similarly, in a study conducted by Sergio et al.[21] on a series of 1,235 pathologies, 58,4% of the cases were reported to be male. There are studies that indicate such pathologies are more prevalent in males[22,23], yet there are also studies that have obtained different results on this matter.[24,25] Some studies have suggested that the greater prevalence of pathologies in males can be explained by poorer oral hygiene habits more frequently observed in males, as well as males being more exposed to trauma compared to females.[26]

Consistent with the results obtained in our study, Jean-Paul et al.[27] reported in their study of 695 patients that the occurrence ratio of cases in the mandible to the maxilla was 3:1. In cases observed in the mandible, they reported that the most common location, at a rate of 36%, was the posterior region of the mandible. These rates may be influenced by the varying frequency of tooth impaction which may cause developmental cysts such as dentigerous cysts and keratocysts.[28] Similarly, there are many studies indicating that the mandible is more frequently affected.[16,21,27] However, in the study conducted by Merva et al.[20], contrary to our findings, they reported that the most frequent occurrence of jaw pathologies was in the anterior maxilla region (35,40%). There are other studies in the literature that also indicate pathologies are more frequently observed in the maxilla.[21,29]

The delayed diagnosis of jaw lesions in this study may be attributed to the underdevelopment of routine dental check-ups and the inadequate importance given to oral hygiene in young ages. Also the slow development of these benign lesions without giving any clinical signs may play an important role in the delayed diagnosis of some cases. Conversely, in older ages, the incidence of intraosseous lesions decreases because patients often become partially or completely edentulous. In our study, the age group with the most frequent occurrence of lesions was the 36-60 age range (44.1%). In a study conducted by Silvia et al.[30], they examined 1310 pathologies located in the jaw area and found the patients' average age to be 35.1 (±16.7). According to the study conducted by Paris at al.[31], the average age of onset for lesions was found to be 42.3 years (±16.1).

Conclusions

Intrabony lesions observed in the jaw region have various etiologies and require careful clinical and radiological evaluation for accurate diagnosis and management. The study aims to shed light on the diagnostic processes of experts in dentistry and maxillofacial surgery and to assist in clinical approaches. Future studies conducted on larger populations can help us better understand the effects of various factors on the development of lesions. Additionally, research

examining the role of genetic and environmental factors can provide in-depth support for the findings.

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Tables

Table 1: Grouping of ages at which pathologies are observed

Age			
		Frequency	Percent
Valid	0-18	45	13,3
	19-35	119	35,2
	36-60	149	44,1
	61+	25	7,4

	Total	338	100,0

Table 2: Gender distribution of pathologies

Gender			
		Frequency	Percent
Valid	Male	197	58,3
	Female	141	41,7
	Total	338	100,0

Table 3: Localization distribution of pathologies

Localization			
		Frequency	Percent
Valid	Maxilla	1	,3
	Maxilla anterior	66	19,5
	Maxilla Posterior	43	12,7
	Maxilla Premolar	2	,6
	Maxilla-mandibula	5	1,5
	Mandibula Anterior	44	13,0
	Mandibula Posterior	175	51,8
	Mandibula Premolar	2	,6
	Total	338	100,0

Table 4: Distribution of the prevalence of diagnoses

Diagnosis			
		Frequency	Percent
Valid	Adenomatoid Odontogenic Tumor	1	,3
	Ameloblastoma	10	3,0
	Solitary Bone Cyst	2	,6
	Botryoid Odontogenic Cyst	1	,3
	Dentigerous Cyst	80	23,7
	Desmoplastic Fibroma	1	,3
	Ectomesenchymal Chondromyxoid Tumor	1	,3
	Fibroosseous Lesions	11	3,3

	Fibrous Dysplasia	1	,3
	Florid Cementoosseous Lesion	1	,3
	Focal Cementoosseous Dysplasia	1	,3
	Glandular Odontogenic Cyst	3	,9
	Hemangioma	2	,6
	Hypercementosis	1	,3
	İncisive Canal Cyst	11	3,3
	Calcifying Epitelial Odontogenic Tumor	1	,3
	Odontogenic Keratocyst	45	13,3
	Condensing Osteitis	1	,3
	Langerhans Cell Histiocytosis	2	,6
	Odontogenic Myxoma	2	,6
	Mucoepidermoid Carcinoma	1	,3
	Nasopharyngeal Type Lymphoepithelial Carcinoma	1	,3
	Odontoma	8	2,4
	Osteochondroma	1	,3
	Radicular Cyst	134	39,6
	Central Gaint Cell Granuloma	7	2,1
	Cementoblastoma	1	,3
	Cemento Ossifying Fibroma	4	1,2
	Cementoosseous Dysplasia	1	,3
	Squamoz Cell Carcinoma	2	,6
	Total	338	100,0

Table 5: Age-Gender Crosstabulation

Age * Gender Crosstabulation					
			Gender		Total
			Male	Female	
Age	0-18	Count	25	20	45
		%	55,6%	44,4%	100,0%
	19-35	Count	69	50	119
		%	58,0%	42,0%	100,0%
	36-60	Count	91	58	149
		%	61,1%	38,9%	100,0%
	61+	Count	12	13	25
		%	48,0%	52,0%	100,0%
Total		Count	197	141	338
		%	58,3%	41,7%	100,0%

Table 6: Diagnosis-Gender Crosstabulation

Diagnosis * Gender Crosstabulation					
			Gender		Total
			Male	Female	
Diagnosis	Adenomatoid Odontogenic Tumor	Count	0	1	1
		%	0,0%	100,0%	100,0%
	Ameloblastoma	Count	4	6	10
		%	40,0%	60,0%	100,0%
	Solitary Bone Cyst	Count	1	1	2
		%	50,0%	50,0%	100,0%
	Botryoid Odontogenic Cyst	Count	1	0	1
		%	100,0%	0,0%	100,0%
	Dentigerous Cyst	Count	57	23	80
		%	71,3%	28,8%	100,0%
	Desmoplastic Fibroma	Count	1	0	1
		%	100,0%	0,0%	100,0%
	Ectomesencymal Chondromyxoid Tumor	Count	1	0	1
		%	100,0%	0,0%	100,0%
	Fibroosseous Lesions	Count	4	7	11
		%	36,4%	63,6%	100,0%
	Fibrous Dysplasia	Count	0	1	1
		%	0,0%	100,0%	100,0%
	Florid Cementoosseous Lesion	Count	1	0	1
		%	100,0%	0,0%	100,0%
		Count	1	0	1

	Focal Cementoosseous Dysplasia	%	100,0%	0,0%	100,0%
	Glandular Odontogenic Cyst	Count	3	0	3
		%	100,0%	0,0%	100,0%
	Hemangioma	Count	1	1	2
		%	50,0%	50,0%	100,0%
	Hypercementosis	Count	0	1	1
		%	0,0%	100,0%	100,0%
	İncisive Canal Cyst	Count	9	2	11
		%	81,8%	18,2%	100,0%
	Calcifying Epitelial Odontogenic Tumor	Count	1	0	1
		%	100,0%	0,0%	100,0%
	Odontogenic Keratocyst	Count	18	27	45
		%	40,0%	60,0%	100,0%
	Condensing Osteitis	Count	1	0	1
		%	100,0%	0,0%	100,0%
	Langerhans Cell Histiocytosis	Count	1	1	2
		%	50,0%	50,0%	100,0%
	Odontogenic Myxoma	Count	1	1	2
		%	50,0%	50,0%	100,0%
	Mucoepidermoid Carcinoma	Count	0	1	1
		%	0,0%	100,0%	100,0%
	Nasopharyngeal Type Lymphoepithelial Carcinoma	Count	1	0	1
		%	100,0%	0,0%	100,0%
	Odontoma	Count	3	5	8
		%	37,5%	62,5%	100,0%
	Osteochonroma	Count	1	0	1
		%	100,0%	0,0%	100,0%
	Radicular Cyst	Count	82	52	134
		%	61,2%	38,8%	100,0%
	Central Gaint Cell Granuloma	Count	2	5	7
		%	28,6%	71,4%	100,0%
	Cementoblastoma	Count	1	0	1
		%	100,0%	0,0%	100,0%
	Cemento Ossifying Fibroma	Count	1	3	4
		%	25,0%	75,0%	100,0%
	Cementoosseous Dysplasia	Count	0	1	1
		%	0,0%	100,0%	100,0%

	Squamoz Cell Carcinoma	Count	0	2	2
		%	0,0%	100,0%	100,0%
Total		Count	197	141	338
		%	58,3%	41,7%	100,0%

Table 7: Localization-Age Crosstabulation

Localization * Age Crosstabulation							
			Age				Total
			0-18	19-35	36-60	61+	
Localization	Total Maxilla	Count	0	0	1	0	1
		%	0,0%	0,0%	100,0%	0,0%	100,0%
	Maxilla anterior	Count	8	28	26	4	66
		%	12,1%	42,4%	39,4%	6,1%	100,0%
	Maxilla Posterior	Count	3	15	24	1	43
		%	7,0%	34,9%	55,8%	2,3%	100,0%
	Maxilla Premolar	Count	0	1	1	0	2
		%	0,0%	50,0%	50,0%	0,0%	100,0%
	Maxilla-mandibula	Count	2	1	2	0	5
		%	40,0%	20,0%	40,0%	0,0%	100,0%
	Mandibula Anterior	Count	9	12	16	7	44
		%	20,5%	27,3%	36,4%	15,9%	100,0%
	Mandibula Posterior	Count	23	61	78	13	175
		%	13,1%	34,9%	44,6%	7,4%	100,0%
	Mandibula Premolar	Count	0	1	1	0	2
		%	0,0%	50,0%	50,0%	0,0%	100,0%
Total		Count	45	119	149	25	338
		%	13,3%	35,2%	44,1%	7,4%	100,0%

Table 8: Diagnosis-Age Crosstabulation

Diagnosis * Age Crosstabulation							
			Age				Total
			0-18	19-35	36-60	61+	
Diagnosis	Adenomatoid Odontogenic Tumor	Count	0	0	1	0	1
		%	0,0%	0,0%	100,0%	0,0%	100,0%
	Ameloblastoma	Count	0	5	4	1	10
		%	0,0%	50,0%	40,0%	10,0%	100,0%
	Solitary Bone Cyst	Count	2	0	0	0	2
		%	100,0%	0,0%	0,0%	0,0%	100,0%
		Count	0	0	1	0	1

	Botryoid Odontogenic Cyst	%	0,0%	0,0%	100,0%	0,0%	100,0%
	Dentigerous Cyst	Count	13	28	35	4	80
		%	16,3%	35,0%	43,8%	5,0%	100,0%
	Desmoplastic Fibroma	Count	1	0	0	0	1
		%	100,0%	0,0%	0,0%	0,0%	100,0%
	Ectomesenchymal Chondromyxoid Tumor	Count	0	0	1	0	1
		%	0,0%	0,0%	100,0%	0,0%	100,0%
	Fibroosseous Lesions	Count	1	1	8	1	11
		%	9,1%	9,1%	72,7%	9,1%	100,0%
	Fibrous Dysplasia	Count	0	0	1	0	1
		%	0,0%	0,0%	100,0%	0,0%	100,0%
	Florid Cementoosseous Lesion	Count	0	0	1	0	1
		%	0,0%	0,0%	100,0%	0,0%	100,0%
	Focal Cementoosseous Dysplasia	Count	0	1	0	0	1
		%	0,0%	100,0%	0,0%	0,0%	100,0%
	Glandular Odontogenic Cyst	Count	0	0	2	1	3
		%	0,0%	0,0%	66,7%	33,3%	100,0%
	Hemangioma	Count	0	0	1	1	2
		%	0,0%	0,0%	50,0%	50,0%	100,0%
	Hypercementosis	Count	0	0	1	0	1
		%	0,0%	0,0%	100,0%	0,0%	100,0%
	Incisive Canal Cyst	Count	0	4	4	3	11
		%	0,0%	36,4%	36,4%	27,3%	100,0%
	Calcifying Epitelial Odontogenic Tumor	Count	0	0	1	0	1
		%	0,0%	0,0%	100,0%	0,0%	100,0%
	Odontogenic Keratocyst	Count	10	17	14	4	45
		%	22,2%	37,8%	31,1%	8,9%	100,0%
	Condensing Osteitis	Count	0	1	0	0	1
		%	0,0%	100,0%	0,0%	0,0%	100,0%
	Langerhans Cell Histiocytosis	Count	1	0	1	0	2
		%	50,0%	0,0%	50,0%	0,0%	100,0%
	Odontogenic Myxoma	Count	1	0	1	0	2
		%	50,0%	0,0%	50,0%	0,0%	100,0%
	Mucoepidermoid Carcinoma	Count	0	0	1	0	1
		%	0,0%	0,0%	100,0%	0,0%	100,0%
	Nasopharyngeal Type Lymphoepithelial Carcinoma	Count	0	0	1	0	1
		%	0,0%	0,0%	100,0%	0,0%	100,0%

	Odontoma	Count	2	5	1	0	8
		%	25,0%	62,5%	12,5%	0,0%	100,0%
	Osteochondroma	Count	0	1	0	0	1
		%	0,0%	100,0%	0,0%	0,0%	100,0%
	Radicular Cyst	Count	9	51	66	8	134
		%	6,7%	38,1%	49,3%	6,0%	100,0%
	Central Gaint Cell Granuloma	Count	2	3	2	0	7
		%	28,6%	42,9%	28,6%	0,0%	100,0%
	Cementoblastoma	Count	1	0	0	0	1
		%	100,0%	0,0%	0,0%	0,0%	100,0%
	Cemento Ossifying Fibroma	Count	2	2	0	0	4
		%	50,0%	50,0%	0,0%	0,0%	100,0%
	Cementoosseous Dysplasia	Count	0	0	1	0	1
		%	0,0%	0,0%	100,0%	0,0%	100,0%
	Squamoz Cell Carcinoma	Count	0	0	0	2	2
		%	0,0%	0,0%	0,0%	100,0%	100,0%
Total		Count	45	119	149	25	338
		%	13,3%	35,2%	44,1%	7,4%	100,0%