Republic of Iraq

Ministry of Higher Education
 and Scientific Research University of Baghdad College of Dentistry

# RETROSPECTIVE CLINICOPATHOLOGICAL ANALYSIS OF LESIONS AFFECTING THE MAXILLA AND PARANASAL SINUSES (DURING PERIOD (2010-2020 

This thesis is submitted to the council of the College of Dentistry/ University of Baghdad in partial fulfillment of the requirement for the degree of Master of Science in Oral and Maxillofacial Pathology

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## ABSTRACT

Introduction: The maxilla and paranasal sinuses can be affected by a variety of diseases ranging from inflammatory to neoplastic conditions. Knowledge about the prevalence and clinicopathological characteristics of these diseases is important to understand their distribution within the population and when a differential diagnosis is being formulated.

Aims of the study: This study aims to find the prevalence and describe the clinicopathological features of biopsied lesions affecting the maxilla and paranasal sinuses.

Materials and Methods: Data for this retrospective study was collected from the pathology archives of nine histopathology laboratories in Baghdad city during the period (2010 - 2020). The inclusion criteria was histopathology reports for patients complaining of a lesion in the maxilla or paranasal sinuses. Lesions were classified based on the most recent world health organization classification into different pathology groups and into three types; non neoplastic, benign tumors and malignant tumors. The following parameters were recorded: age, gender, year of diagnosis, location and diagnosis. Descriptive statistic was performed.

Results: The sample consisted of 1364 patients diagnosed with lesions affecting the maxilla and paranasal sinuses. Patients' age was ranging from one week to 86 years with a mean of 35.34 years and a standard deviation of 18.8 years. The highest proportion of study patients was aged between ( $20-29$ years) $(19.7 \%)$. Males were slightly more affected than females ( $51.4 \%$ and $48.5 \%$ ) respectively. Regarding lesion types, non neoplastic lesions were the most common accounting for (63.8\%) followed by benign tumors $(21.9 \%$ ) and malignant tumors ( $14.3 \%$ ). Radicular cyst was the
most common diagnosis (15\%) followed by pyogenic granuloma (8.1\%) and the most common malignant tumor was squamous cell carcinoma (3.9\%) in both sites. Regarding paranasal sinuses lesions, 314 (23\%) cases of the study sample were identified to affect the sinuses with maxillary sinus being the most affected site ( $80.6 \%$ ). Male patients were more commonly affected 175 (55.7\%). The most frequent disease category was fungal infection ( $25.8 \%$ ) and mucormycosis ( $15.9 \%$ ) was the most common diagnosis. Malignant tumors were more common than benign ( $21.6 \%$ and $18.15 \%$ ) respectively. The most common benign tumor was sinonasal papilloma (4.7\%), while sinonasal squamous cell carcinoma was most common malignant tumor (4.7\%).

Conclusions: This study confirmed the existence of a wide range of lesions in maxilla and paranasal sinuses. The non neoplastic lesions were the most common in both sites with radicular cyst and mucormycosis being the most common diagnoses, while the most common malignant tumor was squamous cell carcinoma followed by adenoid cystic carcinoma

> وزارة النعليم العالي والبحث العلمي العر اقي

جامعة بغداد كلية طب الاسنان

التحليل اللسريري المرضي بأثر رجعي للأفات التي تصيب الفك العلوي و الجيوب

رسالة مققمة الى مجلس كلية طب الأسنان في جامعة بغداد لاستيفاء متطلبات درجة الماجستير في
أمراض الفمو الوجه و الفكين

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