Republic of Iraq Ministry of Higher Education And Scientific Research University of Baghdad College of Dentistry



# Clinicopathological Analysis of Oral Squamous Cell Carcinoma in Iraq During Period (2001-2013)

## **A Thesis**

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### **Abstract**

## **Background:**

Oral cancer is a highly lethal and disfiguring disease. Squamous cell carcinoma of the oral cavity constitutes about 90% of all oral malignancies. The annual incidence and mortality rates vary between different races, genders, and age groups. Like other carcinomas, the risk of intra oral carcinoma increases with increasing age especially for males.

## Aims of the study:

The study was designed to achieve an epidemiological description of the oral squamous cell carcinoma in Iraq in general and in Iraqi governorates except Kurdistan region retrospectively during period 2001-2013 and to obtain a yearly incidence rate for oral squamous cell carcinoma in general (crude rate) and in relation to the gender, age and governorates with reporting the histopathological grading of OSCC and to prepare an (ICD-10) compatible report for OSCC in relation to topography (oral site).

#### **Materials and Methods:**

Cases of OSCC in Iraq and in Iraqi governorates except Kurdistan region were collected during the period (2001-2013) from the following centers after attaining the legal acceptances: Department of oral and maxillofacial pathology, college of dentistry, university of Baghdad, Nuclear medicine and radiotherapy hospital, Iraqi cancer registry center at the ministry of health, Main hospitals in Baghdad and Iraqi governorates, Private labs. for histopathological examinations.

The ICD-O-10 coding system was used for reporting topographical information of OSCC. A prepared patient case sheet was used for collecting the data. The descriptive and inferential statistical methods were used for the collected data (frequency distributions ,percentages , incidence rate , standardized ratio and relative risk)

#### **Results:**

A total of 1664 cases (976 male and 688 female, M:F ratio (1.4:1) with a final histopathological diagnosis as OSCC were recorded in Iraq (except Kurdistan region) during the period 2001-2013. The most affected age group was (50-69 yrs) (48.9%). According to the ICD-10 the most common affected site was tongue (42.7%). The most common grade was grade II which represented by (36.9%). The highest value of frequency distribution and percentage of OSCC cases was reported in Baghdad governorate (25.7%) and the lowest value was reported in Al-Muthana (1.2%).

During (2001-2013) a negative time trend was observed in the overall (crude) incidence rate of all registered OSCC in Iraq in both males and females. The highest incidence rate of age groups was found in age group (70+ yrs) (12.14 per 100,000 per year) in 2002 and 2006. The highest incidence rate (1.23 per 100,000 per year) was found in Al-Basrah in 2006. There was a decrease in the standardized ratio for each year that measure the risk of OSCC with advancing time from 2001 to 2013

## **Conclusions:**

The incidence rate (crude rate) of OSCC decreased in Iraq from 2001 (0.81 per 100,000 per year) to 2013 (0.37 per 100,000 per year) and the standardized ratio showed that there is a decrease in tumor risk with advancing time. The males were more affected by OSCC than females. The most affected age group was (50-69 yrs) . The highest percentage of OSCC cases was reported in Baghdad governorate . The most common affected oral site by SCC was tongue . Grade II was the most common .