# Evaluation of wound infection in maxillofacial injuries

### A thesis

## Submitted to the college of Dentistry University of Baghdad In partial fulfillment of the requirements for the degree of Master of Science in oral and maxillofacial surgery

### By

## Ahmed Samir Aziz BDS (Baghdad)

## **Supervisor**

## Assistant Prof. Dr. Basima GH. Ali

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## Abstract

### **Back ground**

Wound infection defined as "the invasion of micro organisms through a tissue following a break down of local and systemic host defenses". (Brook, 2005.

The development of wound infection is an ongoing problem for many patients specially at the last few years in Iraq because gun shot wounds and their complication are complex when it compared with blunt trauma and injures occurs in road traffic accident.

### **Objectives**

- 1. Evaluate the etiological factors of wound infection in maxillofacial injury.
- 2. Evaluate the effect of the type of wound, cause of wound, age of patient and sex of patient on maxillofacial wound infection.

### Materials and methods

A prospective study on one hundred and thirty three patients with maxillofacial wound infection attending. The oral and maxillofacial department in AL – Wasty Hospital.

In which we use cruse and ford 1980 classification which classify wounds into clean, clean- contaminated, contaminated and dirty infected wounds.

The time of management of maxillofacial wound is listed and classified in this study in to immediate managed wound (within the first 24 hours) and delayed managed wound also we listed the type of wound closure which classified in this study in to primary, secondary and tertiary closure and we show its effect on the type of wound.

A cultivated microbiological test for the patient has been done.

### **Results**

The mostly injured region was the maxillary region (66,9%) while the higher percentage of dirty infected wounds were in the mandibular region, areason for such a distribution was given, depending on the anatomical fact concerning the oral cavity, pharynx and the maxillary sinus, the studied cases varies in severity, article was made to describe the severity through the extension of local signs and symptoms for each case as a result the clinical manifestation of infected maxillofacial wounds were cellulites, abscess and or pus sand gangrene.

### **Conclusions**

- 1. Initial clinical manifestations remain insufficient since cultivated microbiological test could give definitive results.
- 2. All maxillofacial was wounds should be considered as contaminated wounds.
- 3. The majority of infected maxillofacial wounds show apolymicrobial contamination with predominance of streptococci and staphylococci over other type of bacteria.
- 4. There is no statistical difference when use normal saline or diluted Betadine 10% as local irrigant.