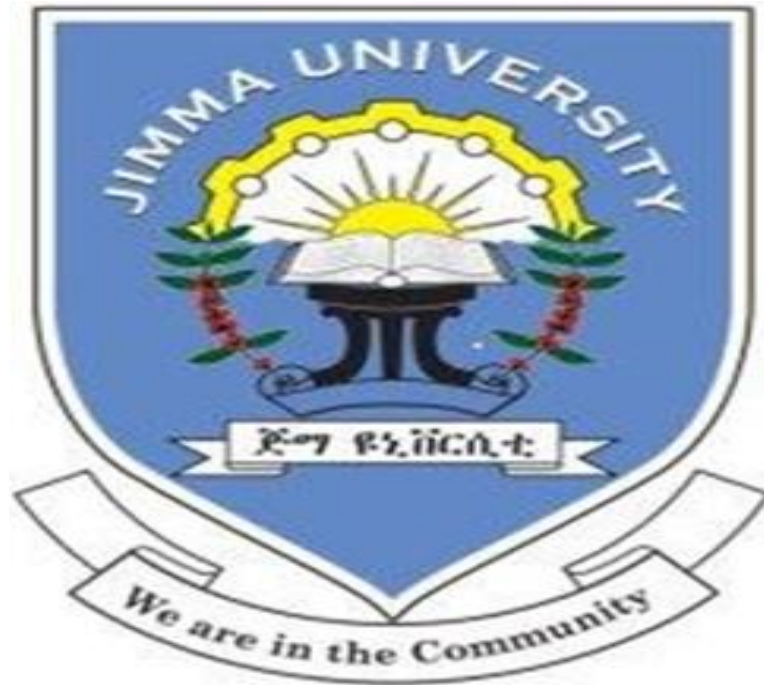


JIMMA UNIVERSITY
GRADUATE STUDIES PROGRAM
DEPARTMENT OF DENTISTRY
ORAL AND MAXILLOFACIAL SURGERY UNIT



MAXILLOFACIAL FRACTURE, ETIOLOGY, PATTERN OF PRESENTATION AND TREATMENT MODALITY

By AbebeTeka

A research paper submitted to the School of Graduate Studies, Jimma University Presented in Partial Fulfillment of the Requirements for the certificate of specialization program in Oral and Maxillofacial Surgery

JimmaUniversity
Jimma,Ethiopia October 2015

JIMMA UNIVERSITY
GRADUATE STUDIES PROGRAM

MAXILLOFACIAL FRACTURE, ETIOLOGY, PATTERN OF PRESENTATION AND TREATMENTMODALITY IN ST.PAUL REFERRAL HOSPITAL IN ADDIS ABABA, ETHIOPIA:

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Advisors

- 1) Seyifu Alemu (MD,General surgeon)
- 2) Professor KifleWoldemichael (MD, MPH)

OCTOBER 201

Abstract

Back ground -Maxillofacial injuries are seen in a large proportion of trauma patients especially in those caused by road traffic accidents. Due to the prominent nature of the area there are several esthetic and psychological impacts associated with the trauma. This in turn causes significant financial expense due to medical costs, the loss of income and even the person's loss of productivity. For these reasons, and more, injuries (maxillofacial as well) are an important health and economic concern for a country. Because the vast majority of maxillofacial injuries are preventable, preventive strategies targeting at the etiology of these injuries is important in order to reduce their occurrence.

Objective -, to investigate the etiology, pattern of presentation and treatment modality of maxillofacial fractures in St. Paul referral hospital in Addis Ababa Ethiopia.

Materials and methods -The medical records and radiograph report of the patients treated for maxillofacial fracture in St. Paul referral hospital over a 5 years period (2002-2007 E.C) were retrospectively revised. A number of parameters include the patient's age gender pattern of facial fractures, treatment modality and associated complications were recorded and assessed.

Results; A total of 620 patients with (90%) male and (10%) females were reviewed. The ratio of males to female was 9:1. Males 18 to 35 years of age sustained the most maxillofacial fractures. The majority of fractures were caused by road traffic accidents (75 %) followed by falls 12%, fighting 8% and others 5 %. There were 395(54%) mandibular, 264 (36 %) maxillary, 44(6%) nasoethmido orbital and 29(4 %) zygomatic complex fractures. There were 346 fractures treated by open reduction and internal fixation with intraosseous wiring (wire osteosynthesis) most commonly used followed by closed reduction with arch bar intermaxillary fixation (152fractures) and internal fixation with plate (plate osteosynthesis) 77(19.4%) used according to the site of fracture. various types of regional complications were recorded in 68 patients (10.9 %).

Conclusion - The finding of this study compared with similar studies reported in the literature, support the view that the causes and pattern of maxillofacial fractures vary from one country

to another with road traffic accidents being the leading cause. Greater efforts toward prevention and treatment programs are highly recommended.

Acknowledgements

I would like to acknowledge Jimma University, first and foremost, for this great learning opportunity allowing me to take part in it. My advisors, Professor KifleWoldemichael and Dr. Seyifu Alemu receive a heartfelt appreciation for the input that they have had and will continue to have in this thesis work.

List of tables

Table1. Causes of maxillofacial fracture in st. Paul hospital Addis Abeba Ethiopia 2015

Table2. Pattern of maxillofacial fractures in st.palhospital, AddisAbeba Ethiopia

Table 3 distribution of regional complications maxillofacial fractures in st.paul hospital, Addis Abeba Ethiopia

Table 4 distributions' of associated body fracture in st.paul hospital Addis Abeba Ethiopia 2015

Table 5 distributions of complications of maxillofacial fracture management in st. Paul hospital AddisAbeba, Ethiopia

TABLE 6 Treatment modalities according to fracture sites in st.paul hospital Addis Abeba Ethiopia 2015.

LIST OF FIGURES

FIG1. The prevalence of maxillofacial fractures according to age group in st.paul hospital, Addis Abeba Ethiopia 2015.

FIG2. Pattern of mandibular fractures in st.Paul hospital Addis Abeba Ethiopia 2015.

FIG3. Pattern of maxillary fractures in st.Paul hospital Addis Abeba Ethiopia 2015.

LIST OF ABBREVIATIONS

IMF - .Intermaxillary fixation

MMF-maxillomandibular fixation

ORIF - open reduction and fixation

No -Number

RTA - road traffic accidents

Contents page

Abstract-----	I
Acknowledgment-----	II
List of tables -----	III
List of figures -----	IV
List of abbreviations -----	V

Chapter One

Introduction-----	1
Statement of the problem -----	3

Chapter Two

Literature review-----	6
Significant of the study-----	11

Chapter Three

Objective -----	12
General objective -----	12

Specific objective -----	12
--------------------------	----

Chapter Four

Materials and methods -----	13
-----------------------------	----

Study area-and period-----	13
----------------------------	----

Study design -----	13
--------------------	----

Source population-----	14
------------------------	----

Sample size and sampling procedures-----	14
--	----

Plan for data dissemination -----	15
-----------------------------------	----

Data quality control-----	15
---------------------------	----

Data processing and analysis-----	15
-----------------------------------	----

Ethical consideration -----	15
-----------------------------	----

Inclusion and exclusion criteria -----	27
--	----

Operational definition -----	27
------------------------------	----

Chapter 5

Results-----	28
--------------	----

CHAPTER 6

Discussion -----	33
------------------	----

Conclusion and recommendation -----	36
-------------------------------------	----

Annex I Reference

ANNEX II CHECK LIST FOR DATA COLLECTION