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Correlation between surgical time and post operative edema following removal of impacted mandibular wisdom tooth

Thesis

Presented to faculty of Oral and
Dental Medicine

In partial fulfillment of the
requirement for the Degree of Master
in
Oral Surgery

By

Abdullah Essam Mohamed EL Hady

(B.D.S 2002)

Faculty of Oral & Dental Medicine
Cairo University

2008

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~~Correlation between surgical time and post-operative oedema following removal of impacted mandibular wisdom tooth~~

العلاقة بين التورم الناتج عن استئصال ضرس العقل السفلي المدفون وزمن العملية

Thesis
Submitted in partial fulfillment for
Master Degree
In
Oral and Maxillofacial Surgery

By
~~Abdullah Essam Mohamed~~

~~El Hady~~

~~(BDS)~~

**Faculty of Oral & Dental Medicine
Cairo University
2008**

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Acknowledgment

Thanks and deepest gratitude are due to ALLAH, the most beneficial and merciful, whose magnificent help was the main factor in accomplishing this work.

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INTRODUCTION

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INTRODUCTION

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Removal of mandibular impacted third molar, needs surgical intervention varying from incision of soft tissue, bone removal, and/or tooth sectioning ending by debridement of the flap and suturing. This procedure takes different times according to many factors as the classification of the impacted tooth, state of the neighboring one, overlying bone, relationship to inferior alveolar canal, condition of the tooth it self and/or surrounding oral pathology.

~~Needs surgical intervention varying from incision of soft tissue, bone removal, and/or tooth sectioning ended by debridement of the socket and suturing. This procedure takes different times according to many factors as the classification of the impacted tooth, state of the neighboring one, overlying bone, relation to inferior alveolar canal, condition of the tooth it self and/or oral hygiene.~~

All these factors may elongate the surgical time assuming good planning, good armamentarium, standard surgical skill and patient cooperation.

~~It may have many~~ This results in various post operative complications which may occur varying ~~between from pain swellingpain, trismus swelling, trismus, tmj, TMJ injury, angle injury,~~ angle fracture and nerve injury. Incidence of this complications and its severity depend ~~on upon~~ many factors as ~~operative~~ time, ~~severty~~ severity of severity of ~~truma trauma, trauma, etc~~ amount of bone removal and surgical maneuver.

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The ~~patient always evaluate~~patient always evaluates the success of ~~operation by~~operation by faster healing and minimal complications following surgery. So avoidance of

~~Surgery so avoidance of~~ complications as ~~possiple~~possible is important ~~necceery~~ for each ~~surgery and there~~surgery. There are always ~~types~~a type of complications which ~~can destroy~~causes patient's ~~dis~~discomfort and lead him/her ~~the patient~~ to a new problems greater than the one which let him need surgical intervention ~~from the first~~primarily.

When we want to say what are the most important serious complication, we have ~~T~~two factors determine importance of ~~complicationswe can measure complications importance by it~~. the first ~~is~~ incidence of ~~occurance~~occurrence, ~~occurrence~~, and the ~~seconed~~second ~~is~~ the need for surgical intervention to treat this ~~complicaion~~complications.

~~Pain, swelling~~Pain, swelling and trismus are the major complications to occur. Others as bleeding TMJ problem, angle fracture, tooth or root displacement to nearby space.

~~complication which can say they are always occur.~~

- Angle fracture and teeth displacement to submandibular space are the complication which ~~always~~need surgical intervention to ~~treat~~-treat.

Post operative swelling or edema. The former complication ~~in~~ addition of its greater incidence its ~~a type of complication which affect~~ the patient ~~ethatic~~esthetic, which lead the patient to staying at home until ~~it resolve so consequently~~ it's a problem ~~affecting the patient~~ ~~soeia~~social life and his work. For this reason we study the edema in this study and tried to correlate it to time of the operation to find how important to put

time in our consideration when want to decrease the post operative edema.

I life and his work.

For this reason I selected the edema in this topic and tried to correlate it, and time of the operation to find if its important to put time in our consideration if we want to o decrease the post operative edema.

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Review of Literature

Review of Literature

Removal of impacted teeth is one of the most common surgical procedures performed by oral and maxillofacial surgeons, and most surgeons cite third molar removal as the operation most likely to humble

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them. Extensive ~~training, training, proper~~ -skills, and experience are necessary to perform this procedure with minimal ~~trauma~~(trauma⁽¹⁻²⁾)

~~when we talk about the development of mandibular third molar, the molar, t~~The mandibular third molar is the most commonly impacted tooth. It also presents the greatest surgical challenge and invites the greatest controversy when indications for removal are considered⁽³⁻⁴⁾ Regarding mandibular third molar development its tooth ~~The mandibular third molar tooth~~ germ is usually visible radiographically by age ~~nine~~ nine years, and cusp mineralization is completed approximately ~~two year~~two years later. At age ~~eleven years~~eleven, the tooth is located within the anterior border of the ramus with its occlusal surface facing almost directly anteriorly. The level of the tooth germ is approximately at the occlusal plane of the erupted dentition. Crown formation is usually complete by age ~~forteen~~fourteen years, and the roots are approximately fifty ~~percent formed~~percent formed by age ~~sixteen years~~sixteen years. Usually the roots are completely formed with an open apex by age ~~eighteen years~~. ~~By age~~At the end of twenty ~~four years~~four years ninety five ~~percent of~~percent of all third molars are completely erupted ~~that will erupt have completed their eruption.~~⁽⁴⁻⁵⁾

The change in orientation of the occlusal surface from a straight anterior inclination to a straight vertical ~~inclination~~one occurs primarily during root ~~formation~~.

~~During formation~~During this time the tooth rotates from horizontal to mesioangular to vertical position. Therefore, the normal development and eruption pattern, assuming the tooth