

Incidence of Dry Socket after Third Molar Extraction

M.D.Ashok Kumar, S.Gheena,
Saveetha Dental College & Hospitals, Chennai

Abstract:

Aim: The aim of the study is to evaluate incidence of dry socket following extraction of third molars.

Objective: Information regarding the type and time period of extraction, interval between presentation, management given, and its outcome will be retrieved and analyzed to study the incidence of dry socket after third molar extraction.

Background: One of the most common postoperative complications following the extraction of third molar is a condition known as dry socket. Although the etiology of dry socket is debated, it is probably multi-factorial, and its pathogenesis remains unknown.

Reason: To understand about the percentage of Incidence of dry sockets in both male and female patients with both maxillary and mandibular third molar extraction.

INTRODUCTION:

The aim of the current study was to evaluate the incidence of dry socket in South Indian population in a hospital between a time period of four months. The common postoperative complications following the extraction of third molar is a condition known as dry socket. It is characterized by severe pain starting usually on the second or third day postoperatively. Although the etiology of dry socket is debated, it is probably multifactorial, and its pathogenesis remains Unknown. Some of the factors include vasoconstriction activity of the local anesthetic agents, imbalance of vitamin levels, contraceptive pills, smoking, age and gender, and trauma. The reason was to understand about the percentage of Incidence of dry sockets in both male and female patients with both maxillary and mandibular third molar extraction.

MATERIALS AND METHODS:

420 patients with a total of 444 extractions entered this study. Extractions to remove the third molar teeth between January 2015 and March 2015 were included in this study. This study was done at Saveetha dental college and hospital, Chennai, India. Records of total number of patients were studied who underwent extraction of third molar for various reasons. There were both male patients and female patients. Information regarding indications for extraction, extracted tooth status, interval between presentation, management given, and its outcome were retrieved and analyzed.

RESULT:

Out of the the total number of extraction done in our hospital, only one female patient was found with an incidence of this dry socket in 48.

The case report is as follows,

Name: Vijayalakshmi

Age/sex: 31/F

She reported with a chief complaint of pain in her lower right back tooth region of the jaw for a week.

The past history was that her 48 was extracted a week before she reported, in a private clinic.

The diagnosis, Incidence of a dry socket in 48 was found, and the treatment objective was to manage the dry socket

by the clinical procedures and the patient was recalled and reviewed.

The following table shows the number of male and female patients who have undergone their third molar extraction in our hospital and their tooth numbers.

	18	28	38	48
Male	35	42	76	47
Female	51	41	72	80

Inference:

Hence, Out of 420 patients, only one female patient was found with an incidence of dry socket in the tooth 48 between the time period between January 2015 and April 2015.

DISCUSSION:

A dry socket is a painful, foul smelling postoperative condition that develops during the course of the first several days after a tooth extraction. An equivalent term for a dry socket is "alveolar osteitis." Dry sockets occur when either an adequate blood clot has failed to form in the extracted tooth's socket or else the blood clot that did form has been dislodged and lost.

Since the formation of a blood clot is an important part of the healing process, the healing of the extraction site is disrupted and delayed. The term "dry socket" comes from the appearance of the wound. Since no blood clot is present, exposed bare bone is visible.[2]

A dry socket's symptoms typically include:

A dull, often throbbing, pain that doesn't first appear until three or four days after the tooth has been extracted. The pain can be moderate to quite severe. The socket typically has a foul odor or taste coming from it.

Although there are risk factors that may predispose a dental patient to the formation of a dry socket, knowing who will actually develop one is totally unpredictable.

Dentists typically advise their patients that after having a tooth pulled they should, Place firm biting pressure on the gauze packing that has been placed over their extraction site for the next 30 to (preferably) 60 minutes. Doing so will help to insure that a proper blood clot has a chance to form in their tooth's empty socket.

Once a clot has formed, a patient must be careful not to disrupt it. To aid in this goal, during the first 24 hours after their surgery they should ...

- Avoid vigorous rinsing or spitting.
- Refrain from creating negative-pressure situations such as sucking on a straw or drawing in on a cigarette.
- Avoid alcohol and tobacco use in general.
- Minimize physical activities and exercise.
- Avoid hot liquids such as coffee and soup.
- Each of the factors above place the blood clot at risk. They should be avoided.[1]

Studies have shown that smokers are significantly more likely to get a dry socket as compared to those who don't.

The sucking action created when a person smokes may dislodge or otherwise disrupt the blood clot that has formed in their tooth's socket. The carbon monoxide that enters a person's bloodstream when they smoke limits the amount of oxygen that can be carried to (and therefore is available for) their extraction site's healing tissues. Nicotine creates systemic effects that interfere with the normal healing process. (Like vasoconstriction, which reduces blood flow to tissues.) At a local level, tobacco smoke may damage or be toxic to tissue cells.[3]

Women who take birth control pills may be at greater risk for getting dry sockets.

This factor, however, may have been more of an issue in previous decades when oral contraceptives contained a larger dosing of estrogen. The correlation between oral contraceptives and dry sockets may be due to fibrinolysis activity triggered by estrogen (this process leads to blood clot disintegration). It's possible (but still debated) that women as a group are more likely to experience dry sockets than men. If they are, one reason could be related to the use of oral contraceptives.[4]

According to one of the abstracts[6] referred,

Their result was,

Thirty-one teeth (5.6%) of a total of 554 teeth extracted during the period of the study developed dry socket. The mean age (SD) of the 27 patients who developed dry socket was 32.2 +/- 13.0 years, (m; f ratio of 1: 4.4). Most (44.5%) of the patients who presented with dry socket were in the 3rd decade of life, with more than half (59%) of them presenting on the 3rd day following extraction. Mandibular and maxillary teeth were equally affected. Molars and premolars were exclusively affected. Difficulty of extraction was significantly associated with the development of dry socket.

But according to modern trends and recent strategy in our college only one patient was found to be developed with dry socket out of the 444 extractions taken in our study.

CONCLUSION:

Through this study we conclude the incidence of dry socket in third molars is very less compared to many other studies done in various clinics.

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