

## Original Article

### Complications in patients undergoing Dental Extractions: An observational study

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#### ABSTRACT:

**Introduction:** Dental extractions were one of the common dental procedures performed these days. Hence; we planned the present study to assess complications occurring in patients undergoing dental extractions. **Materials & methods:** A total of 100 patients scheduled to undergo dental extraction were included. Dental extractions were carried out in all these patients under the hands of skilled surgeons. Postoperative instructions were given and follow-up was done for assessing the postoperative complication. All the results were compiled in Microsoft excel and were analysed. **Results:** Most significant postoperative complications observed in the present study were dry socket, bleeding, postoperative swelling and postoperative pain found to be present in 4, 5, 6 and 6 patients respectively. **Conclusion:** Dental extraction procedures are often accompanied by complications. Therefore, special care should be taken while doing dental extractions.

**Key words:** Dental, Extraction.

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#### INTRODUCTION

The developments in the medicinal field led to demographic changes characterized by a growth in the elderly population. The proportion of patients with mobility limitations is higher in this population.<sup>1, 2</sup> Since the need for dental treatments does not skip any population group, a special facility had to be developed in order to solve problems of availability and accessibility. Surgical removal of impacted third molars is one of the most common procedures carried out in oral and maxillofacial surgery.<sup>3</sup> The many risks and considerations involved when performing an extraction can present a particular challenge to the dental professional, especially regarding management of bleeding.<sup>4</sup> Many factors can increase the potential difficulty of an extraction, including difficult root morphology and some inflammatory disorders, but with a thorough medical history, a complete pre-operative examination, and adherence to proper surgical guidelines, complications can be kept to a minimum.<sup>5-7</sup>

Hence; we planned the present study to assess complications occurring in patients undergoing dental extractions.

#### MATERIALS & METHODS

The present study was conducted in the department oral surgery. It included assessment of complications in patients undergoing dental extractions. A total of 100 patients scheduled to undergo dental extraction were included.

The inclusion criteria were:

- Patients over thirty years
- Patients who underwent surgical extraction by the mobile dental clinic
- Complete data regarding the systemic conditions details of the surgical treatment and the follow up of at least one month postoperatively.

Exclusion criteria of patients:

- High blood pressure (over 160/100).
- Recent MI
- Signs of CHF
- Uncontrolled movements (Parkinson)
- Non cooperative patients.

Dental extractions were carried out in all these patients under the hands of skilled surgeons. Postoperative instructions were given and follow-up was done for assessing the postoperative complication. All the results were compiled in Microsoft excel and were analysed.

**RESULTS**

A total of 100 patients were included in the present study, among which, 60 were males while the remaining 40 were females as shown in Table 1. Mean age of the patients of the present study was 38.5 years. Most significant postoperative complications observed in the present study were dry socket, bleeding, postoperative swelling and postoperative pain found to be present in 4, 5, 6 and 6 patients respectively as shown in Table 2, Graph 1.

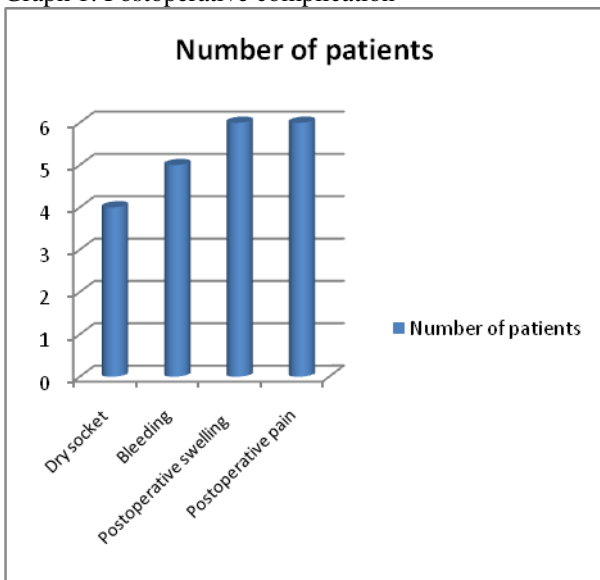
Table 1: Demographic data

Parameter	Value	
Mean age (years)	38.5	
Gender	Male	60
	Female	40

Table 2: Postoperative complication

Postoperative complications	Number of patients
Dry socket	4
Bleeding	5
Postoperative swelling	6
Postoperative pain	6

Graph 1: Postoperative complication



**DISCUSSION**

The developments in the medicinal field led to demographic changes characterized by a growth in the elderly population. The proportion of patients with mobility limitations is higher in this population. In the present study, a total of 100 patients were included in the present study, among which, 60 were males while the remaining 40 were females as shown in Table 1. Mean

age of the patients of the present study was 38.5 years. Tong DC determined the frequency and correlates associations of post-extraction complications at a dental school. Provider characteristics, patient demographic characteristics, patient medical history, teeth extracted and occurrence of postoperative complications. Of the 598 extractions (540 routine and 58 surgical) which were undertaken in the audit period, 74 (12.4%) resulted in post-operative complications. Dry socket and post-operative pain were the major complications. A higher complication rate was found among patients treated by fourth-year undergraduate students than among those treated by more senior students or staff. Post-operative complications were not significantly associated with patients' ethnicity or medical history. The rate of postoperative complications at the Univeristy of Otago's Faculty of Dentistry is consistent with reports in existing literature and inversely associated with operators' experience.<sup>8</sup>

Most significant postoperative complications observed in the present study were dry socket, bleeding, postoperative swelling and postoperative pain found to be present in 4, 5, 6 and 6 patients respectively as shown in Table 2, Graph 1. Nusair YM et al determined the prevalence, clinical picture, and risk factors of dry socket at the Dental Teaching Center of Jordan University of Science and Technology (DTC/JUST). Two specially designed questionnaires were completed over a four-month period. One questionnaire was completed for every patient who had one or more permanent teeth extracted in the Oral Surgery Clinic. The other questionnaire was completed for every patient who returned for a post-operative visit and was diagnosed with dry socket during the study period. There were 838 dental extractions carried out in 469 patients. The overall prevalence of dry socket was 4.8%. There was no statistically significant association between the development of dry socket and age, sex, medical history, medications taken by the patient, indications for the extraction, extraction site, operator experience, or the amount of local anesthesia and administration technique used. The prevalence of dry socket following non-surgical extractions was 3.2%, while the prevalence following surgical extractions was 20.1% (P< 0.002). The prevalence of dry socket following surgical and non-surgical extractions was significantly higher in smokers (9.1%) than in non-smokers (3%) (P = 0.001), and a direct linear trend was observed between the amount of smoking and the prevalence of dry socket (P = 0.034). The prevalence of dry socket was significantly higher in the single extraction cases (7.3%) than in the multiple extraction cases (3.4%) (P = 0.018). The clinical picture and management of dry socket at DTC/JUST were similar to previous reports in the literature. The prevalence of dry socket, its clinical picture, and management at DTC/JUST are similar to those reported in the literature. Smoking and surgical trauma are associated with an increased incidence of dry socket. Moreover, patients who had single extractions were more likely to develop dry socket

than those who had multiple extractions in the same visit.<sup>9</sup>

## CONCLUSION

From the above results, it can be concluded that dental extraction procedures are often accompanied by complications. Therefore, special care should be taken while doing dental extractions.

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