



Assessment of Pain Experience After Simple Tooth Extraction

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Abstract

Background: Removal of teeth causes pain, swelling, and difficulty in opening the mouth. The present study was conducted to assess pain experience after simple tooth extraction. **Material & Methods:** 90 patients undergoing extraction of both genders were recorded. Pain assessment was recorded on the 10-mm NS ("No pain" to "Worst pain possible"). The character of pain was indicated (yes/no) using 4 descriptors according to the McGill Pain Questionnaire: constant pain, shooting pain, dull pain, and pain when chewing or biting. **Results:** Out of 90 patients, males were 40 and females were 50. Pain characters was constant in 30, shooting in 15, mild in 12, when chewing in 8 and none in 25 cases. The difference was significant ($P < 0.05$). Pain occurred in 52 chronically inflamed teeth and 38 grossly decayed teeth. The difference was significant ($P < 0.05$). **Conclusions:** Pain after tooth extraction is common and hence use of analgesics and anti-inflammatory is recommended.

Keywords:- Analgesics, Anti-inflammatory, Pain.

INTRODUCTION

Removal of teeth causes pain, swelling, and difficulty in opening the mouth (trismus). Numerous studies evaluated the effects of different anti-inflammatory drugs on these responses with the aid of techniques including ultrasonography, visual analog pain scales, photography, and monitoring of analgesic ingestion.^[1]

Postoperative pain is related significantly to the amount of surgical trauma. Surgical removal of bony impactions and osseous periodontal surgery are more traumatic and

produce more intense pain when compared with simple uncomplicated tooth extraction.^[2] Little information is available in the literature about pain experience after simple uncomplicated tooth extraction.^[3] Most of the literature focuses on postoperative pain after surgical removal of impacted third molars or on the effectiveness of different pharmaceutical options in combating postsurgical pain.^[4] Pain is also one of the most common postoperative complications of extraction and might be caused by the release of pain mediators from the injured tissues. Pain is an important factor in clinical practice and could even discourage

patients from seeking dental treatment.^[5] It begins after the anesthesia subsides and reaches its peak levels during the first postoperative day. If dry socket or infection occur, the onset of inflammation will complicate alleviation of postoperative pain.^[6] The present study was conducted to assess pain experience after simple uncomplicated tooth extraction.

MATERIAL AND METHODS

The present study comprised of 90 patients undergoing extraction of both genders. The consent was obtained from all enrolled patients.

Data such as name, age, gender etc. was recorded. Pain assessment was recorded on the

10-mm NS (“No pain” to “Worst pain possible”). The character of pain was indicated (yes/no) using 4 descriptors according to the McGill Pain Questionnaire: constant pain, shooting pain, dull pain, and pain when chewing or biting. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

[Table 1] shows that out of 90 patients, males were 40 and females were 50.

[Table 2, Figure 1] shows that pain characters was constant in 30, shooting in 15, mild in 12, when chewing in 8 and none in 25 cases. The difference was significant (P< 0.05).

Table 1: Distribution of patients

Total- 90		
Gender	Males	Females
Number	40	50

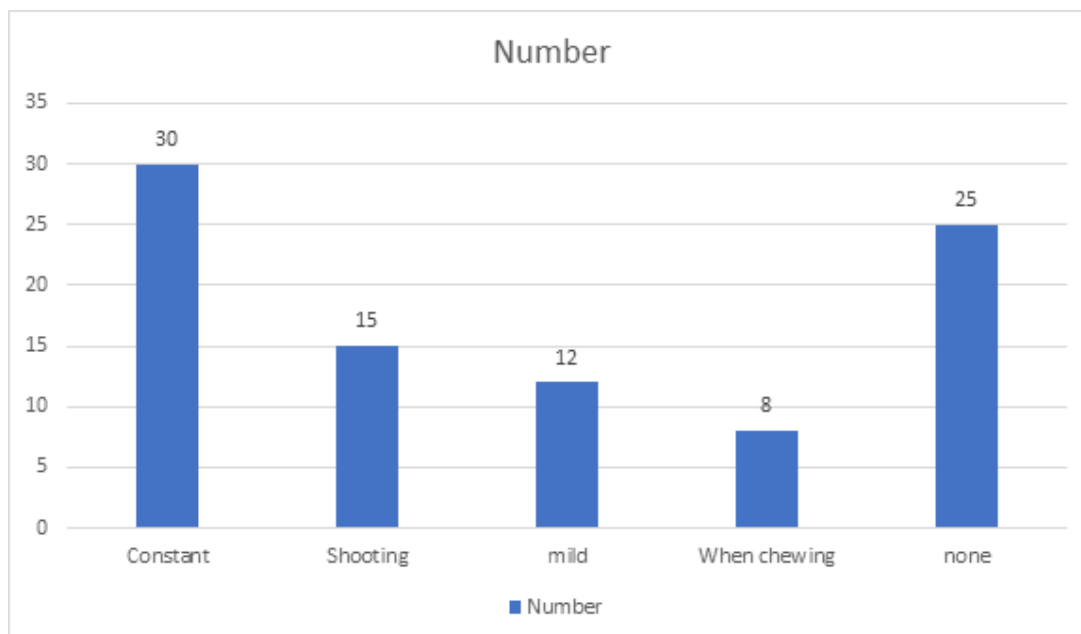


Figure 1: Pain characters reported by patients

Table 2: Pain characters reported by patients

Pain characters	Number	P value
Constant	30	0.05
Shooting	15	
Mild	12	
When chewing	8	
None	25	

Table 3: Type of tooth and pain

Type of tooth	Number	P value
Chronically inflamed teeth	52	0.01
Grossly decayed teeth	38	

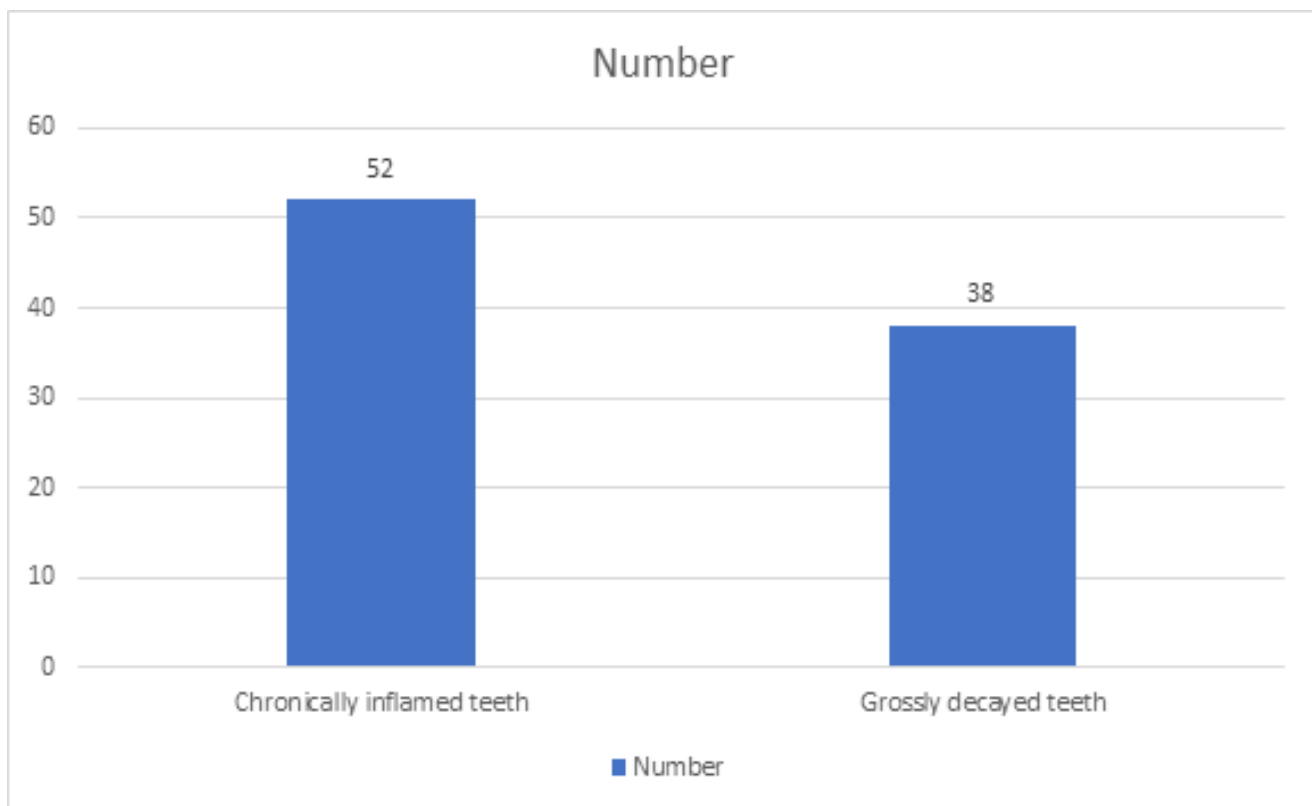


Figure 2: Type of tooth and pain

[Table 3, Figure 2] shows that pain occurred in 52 chronically inflamed teeth and 38 grossly decayed teeth. The difference was significant ($P < 0.05$).

DISCUSSION

One of the most common procedures carried out in dental clinics and the most frequent task



done at oral and maxillofacial surgery clinics is the extraction of teeth.^[7] This procedure is frequently followed by complications in the mandible including both iatrogenic (e.g., nerve injury, bone fractures, etc.) and inflammatory ones, such as dry socket, postoperative pain, delayed healing, postoperative infection, hematoma, swelling, trismus, etc.^[8] Although the overall complication rate might be generally low, and most complications are minor, this surgery is so frequent that the population's morbidity of complications may be noticeable; thus, identifying methods to control or reduce them is a major concern.^[9] Besides, not all complications are rare. There are frequent and debilitating complications as well, including postoperative pain.^[10] The present study was conducted to assess pain experience after simple uncomplicated tooth extraction.

We found that out of 90 patients, males were 40 and females were 50. Pain characters was constant in 30, shooting in 15, mild in 12, when chewing in 8 and none in 25 cases. Alkhateeb et al,^[11] assessed pain experience after simple uncomplicated tooth extraction and to see if there is a need to prescribe analgesic drugs after such a procedure. Pain intensity was assessed on a numeric scale, and use of analgesic drugs and pain quality were recorded. At the evening of extraction 81.8% of patients had pain. Female gender predominance in pain reporting was statistically significant on post-extraction days 3 and 5. Chronically inflamed teeth caused the highest mean pain intensity scores and non-smokers showed significantly higher mean pain intensity scores compared with smokers. Mild pain was experienced by most patients

(38.6%) on the evening of extraction. It was found that 55.3% of participants (largely females) used analgesic drugs on the evening of extraction, and 6.8% of participants still used analgesic drugs on day 7 post-extraction. There was a significant correlation between mean pain intensity score and previous dental injection pain.

We observed that pain occurred in 52 chronically inflamed teeth and 38 grossly decayed teeth.

Gan TJ,^[12] conducted a cross-sectional study upon a sample 130 patients to assess intensity of post-operative pain and unfavorable outcomes after simple tooth extraction. Assessment of general and dental unfavorable post-operative effects experienced was done. Pain intensity was assessed on a numeric scale, and use of analgesic drugs and pain quality were recorded. Results showed that the greatest possibility of appearance of an unfavorable outcomes, was on day 2 post-extraction i.e. 66.9%, followed by day 3 post-extraction (20.8%). Pain was a predominant complaint that was felt till the third day. It was highest on the day of extraction (6.33 on a numerical scale with the upper limit of ten). The intensity of pain linearly declined on day 2 to day 3 i.e. from a mean score of 3.68/10 to 1.2/10. The most notable unfavorable outcome was of swelling on both, 42.3% on day 2 and 11.5% on day 3 of post-extraction. Other outcomes included dry socket, intensified sensitivity, bleeding and temporary depressive symptoms such as general aches, loss of appetite, anxiety and negative insight.

Cheung et al,^[13] found that healing of normal uncomplicated extraction alveolus caused



moderate to severe pain. Adeyemo et al,^[14] found that uncomplicated extraction socket healing was associated with mild or moderate pain up to the third day after extraction in 9.6% of cases whereas 2.4% of patients had mild pain throughout the seventh post-extraction day.

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CONCLUSIONS

Authors found that pain after tooth extraction is common and hence use of analgesics and anti-inflammatory is recommended.

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