

Evaluation of Patients' Knowledge for Third Molar Removal

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ABSTRACT

Purpose: Dental patients feel anxious before most dental treatments presuming that the procedure will cause pain and discomfort. Extraction in oral surgery has been reported to induce highest level of anxiety among other procedures. The surgical removal of mandibular and maxillary third molars is the most commonly performed dentoalveolar procedures in oral and maxillofacial surgery. Individuals who lack knowledge about the procedure are the ones who have preoperative anxiety.

Materials and methods: Preoperative information about the procedure significantly reduces patients' anxiety. In this study, several preoperative variables were recorded (during preoperative, intraoperative, and postoperative phases) and patients' anxiety regarding third molar extraction was assessed through the use of questionnaire.

Results: The sample was composed of 100 patients (50 female patients and 50 male patients) divided into two groups. The first had some previous experience with extractions (50 patients) and the second had no experience (50 patients). The most frequent questions regarded the number of teeth to be extracted, and the most prevalent misconception was about medications before surgery. Patients with a previous history of dental extractions had more questions about use of medication before surgery. Patients without previous experience with extraction had more concerns about local anesthesia techniques.

Conclusion: Patients with a history of tooth extraction and those without it presented variation of knowledge about third molar surgery. Both groups of patients needed detailed perioperative instructions about the procedure. These results may provide oral and maxillofacial surgeons with useful information about patients' knowledge throughout the surgical process.

Keywords: Anxiety, Extraction, Knowledge, Surgical, Third molar.

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INTRODUCTION

Third molar extraction is a common surgical procedure for young adults and adolescents. This procedure is usually associated with a high level of dental anxiety and discomfort for patients.¹⁻³ Improving treatment, increasing patient comfort, minimizing perioperative risks, and implementing anxiety-reducing procedures during surgery are very critical.⁴ Maneuvers like a calm clinical environment, confident surgeon and their team, administering preoperative anxiolytics, providing preemptive analgesia, and providing knowledge about the procedure give satisfactory results.⁵⁻¹⁰ Studies have shown that lack of knowledge about the procedure is one of the major contributors to preoperative anxiety of patients undergoing third molar surgery.¹¹ Therefore, the purpose of this study was to investigate the perioperative (preoperative, intraoperative, and postoperative phases) perception of patients who presented for extraction of third molars.

MATERIALS AND METHODS

This study is a prospective, cross-sectional, observational investigation on patients' knowledge about third molar extraction. The sample consisted of all patients with indications for third molar removal in the Department of Oral and Maxillofacial Surgery, Azeezia College of Dental Sciences and Research, Meeyannoor, Kollam, Kerala, India, from April 2017 to May 2017. Demographics, indication for third molar extraction, and radiographic degree of impaction according to the classification of Winter¹²—vertical mesioangular, distoangular, horizontal, and inverted—and the classification of Pell and Gregory¹³—1, 2, or 3 and A, B, or C were performed. All patients were interviewed exclusively. A checklist was then reviewed with the patient as detailed later, and as presented in the "Results" section. The guidelines used for questions and information were based on those proposed by Ness and Peterson,¹⁴ White et al,¹¹ and Brasileiro et al.¹⁵ Patients were divided into two groups. Group I comprised patients with previous experience with extractions. Patients in this group had either simple or surgical extraction. Group II comprised patients with no previous extraction experience. Descriptive statistics was conducted.

RESULTS

In total, 100 patients (50 female patients and 50 male patients) had one or more third molars removed. The patients' age ranged from 15 to 65 years. The knowledge about third molar extraction according to surgical stages is given in Table 1. According to the classification of

Table 1: Knowledge about third molar extraction according to surgical stages

Question	Knowledge (% of patients)
<i>Preoperative</i>	
Can I drink/eat before the procedure?	Informed (94.1%) Question (5.9%) Misconception (0%)
How should I clean my teeth?	Informed (100%) Question (0%) Misconception (0%)
Should I take any medication?	Informed (56.7%) Question (14.9%) Misconception (28.4%)
<i>Intraoperative</i>	
The anesthesia technique is local or general?	Informed (76.1%) Question (23.9%) Misconception (0%)
How much discomfort is expected during surgery?	Informed (80.6%) Question (17.9%) Misconception (1.5%)
How long is surgery?	Informed (74.7%) Question (16.4%) Misconception (8.9%)
Will all teeth be removed at once?	Informed (35.1%) Question (59.6%) Misconception (5.3%)
Is it necessary to cut the gum?	Informed (94%) Question (4.5%) Misconception (1.5%)
Is it necessary to suture?	Informed (85.2%) Question (8.9%) Misconception (5.9%)
<i>Postoperative</i>	
How much discomfort is expected after surgery?	Informed (67.2%) Question (23.9%) Misconception (8.9%)
How long is my postoperative recovery?	Informed (38.9%) Question (52.2%) Misconception (8.9%)
What should I drink/eat after surgery?	Informed (55.3%) Question (26.8%) Misconception (17.9%)
What type of hygiene should I perform?	Informed (61.2%) Question (14.9%) Misconception (23.9%)
When do I return for a postoperative visit?	Informed (100%) Question (0%) Misconception (0%)

Winter,¹² most teeth were in a vertical position (60.34%), followed by mesioangular (31.05%), horizontal (5.22%), and distoangular (3.39%) positions. According to the classification of Pell and Gregory,¹³ the third molar positions in order of decreasing frequency were A (50.73%), C (44.92%), and B (4.35%) for maxillary teeth and 2B (37.23%), 1B (23.56%), 1A (20.59%), 2A (16.96%), and 2C (1.66%) for mandibular teeth.

DISCUSSION

Anxiety is an emotion characterized by feelings of tension and may produce physical changes, such as tachycardia and increased baseline blood pressure. Okawa et al⁵ reported that patients felt more pain if the anxiety status was higher in the therapeutic environment. van Wijk and Lindeboom⁶ showed that several measures of anxiety control were strongly related to anticipated pain and pain in the week after extraction. Based on a detailed and systematic overview of patients' needs and fears, a trustworthy professional relationship may be established and, indirectly, guide the patient through a less stressful environment and to a successful postoperative outcome. Researchers have confirmed the effectiveness of preoperative information provision for anxiety reduction during dentoalveolar surgery.¹⁵ Issues selected for evaluation in our study covered concerns and misconceptions presented by patients satisfactorily. Major concerns were identified as questions in the intraoperative stage (number of teeth to be removed and type of anesthesia delivered) and the postoperative phase (recovery time, diet, and possible discomfort). Professionals must also focus on possible misconceptions regarding preoperative medication use, length of procedure, postoperative oral hygiene instructions, and diet. Regardless of the indications for third molar removal, all patients must be completely informed.

CONCLUSION

Managing perioperative anxiety is still a major challenge in oral and maxillofacial surgery. This is irrespective of technical, pharmacologic, and surgical advances. The development of stress-reducing and anxiolytic perioperative techniques is of considerable importance for both patients and surgeons. Our study showed that there was a lack of information conveyed to the patient and/or the information was not provided efficiently when patients were referred for surgery.

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