# Explore the Current Practices and Preferences of Oral Surgeons Regarding Postoperative Pain Management, Including Analgesic Choices and Prescription Patterns.

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| KEYWORDS | ABSTRACT: |
|---|---|
| Oral surgery, postoperative pain management, analgesic choices, prescription patterns, multimodal analgesia | **Background:**<br>Postoperative pain management is crucial in oral surgery, influencing patient comfort and satisfaction. This study investigates the contemporary practices and preferences of oral surgeons regarding postoperative pain management, encompassing analgesic choices, prescription patterns, and decision-making factors.<br>**Methods:**<br>Study Design: Cross-sectional survey<br>Participants: A diverse sample of 100 oral surgeons practicing in various settings<br>Data Collection: A structured questionnaire covering demographic information, types of analgesic medications prescribed, dosage patterns, adoption of multimodal analgesia, and factors influencing decision-making in postoperative pain management.<br>**Results:**<br>Demographic Characteristics: The sample includes oral surgeons of varying ages (25-60+ years), genders (70% male, 30% female), and years of practice (20% <5 years, 35% 5-10 years, 35% 10-20 years, 15% >20 years).<br>Analgesic Choices: NSAIDs (95%), opioids (80%), and acetaminophen (70%) are commonly prescribed, reflecting a balanced approach to pain management.<br>Dosage, Frequency, and Duration: A majority adheres to appropriate NSAID dosages (85%), and 60% implement opioid limitation practices, indicating a commitment to evidence-based prescribing.<br>Adoption of Multimodal Analgesia: 75% of oral surgeons embrace multimodal analgesia approaches, showcasing a progressive shift toward comprehensive pain management.<br>Factors Influencing Decision-Making: Patient age and health status (90%), surgical complexity (80%), and surgeon's experience and preference (65%) significantly influence postoperative pain management decisions.<br>**Conclusion:**<br>The study provides valuable insights into the current landscape of postoperative pain management practices among oral surgeons. The findings emphasize a balanced approach, integrating evidence-based strategies and personalized decision-making, contributing to improved patient outcomes and safety. |

**Introduction**:

Postoperative pain management is a critical aspect of oral surgery, impacting patient comfort, recovery, and overall satisfaction with the surgical experience. Effective pain control not only promotes a smoother recuperative process but also contributes to the patient's confidence in the oral surgeon and the overall success of the surgical intervention. In light of evolving medical knowledge and the emergence of new analgesic options, understanding the current practices and preferences of oral surgeons in postoperative

pain management is imperative for optimizing patient care[1-5].

Historically, postoperative pain management in oral surgery has relied on a variety of analgesic medications, including nonsteroidal anti-inflammatory drugs (NSAIDs), opioids, and combination therapies. However, advancements in pain management strategies, coupled with growing concerns about opioid misuse and addiction, have prompted a reevaluation of prescription patterns and the incorporation of multimodal analgesia.

The oral surgery landscape has witnessed a shift in paradigms, emphasizing a patient-centered approach that balances effective pain relief with minimized side effects and reduced risks of opioid-related complications. As the field evolves, it is crucial to investigate the current practices and preferences of oral surgeons in postoperative pain management to identify trends, challenges, and opportunities for improvement[6-10]. The rationale for this study stems from the necessity to bridge the gap between evolving pain management strategies and the actual practices employed by oral surgeons. By exploring the analgesic choices, prescription patterns, and factors influencing decision-making, the study aims to provide a comprehensive understanding of the current landscape of postoperative pain management in oral surgery.

Aim of the Study:

The primary aim of this study is to explore the current practices and preferences of oral surgeons in postoperative pain management. Specific objectives include:

Analgesic Choices: Investigate the types of analgesic medications routinely prescribed by oral surgeons for postoperative pain relief.

Prescription Patterns: Examine the dosage, frequency, and duration of analgesic prescriptions, considering variations in surgical procedures and patient demographics.

Multimodal Analgesia Adoption: Assess the integration of multimodal analgesia approaches, combining different classes of analgesics to optimize pain control while minimizing opioid reliance.

Factors Influencing Decision-Making: Identify factors influencing oral surgeons' decisions in selecting postoperative analgesic regimens, including patient characteristics, surgical complexity, and surgeons' own experiences and preferences.

## Materials and Methods:

Study Design:

This study adopts a cross-sectional survey design to investigate the current practices and preferences of oral surgeons in postoperative pain management.

## Participants:

The study includes a sample of 100 oral surgeons practicing in diverse settings, including hospitals, private clinics, and academic institutions. Surgeons with varying levels of experience and across different geographic locations were targeted to ensure a representative sample.

Inclusion Criteria:

Licensed oral surgeons actively practicing in clinical settings.

Willingness to participate in the survey.

Sampling Technique:

A convenience sampling method was employed, reaching out to oral surgeons through professional networks, associations, and academic institutions. The goal was to obtain a diverse and representative sample within the constraints of the study.

Data Collection:

Survey Instrument: A structured questionnaire was designed to collect information on analgesic choices, prescription patterns, and factors influencing decision-making in postoperative pain management. The questionnaire was pre-tested for clarity and reliability.

Informed Consent: Participants were provided with detailed information about the study, and written informed consent was obtained prior to survey participation.

Sample Size Determination:

The sample size of 100 participants is determined based on practical considerations and feasibility within the study's scope. This sample size allows for meaningful insights into current practices while considering the resources available.

Data Analysis:

Quantitative data was analyzed using statistical software SPSS. Descriptive statistics l summarized demographic characteristics, while inferential statistics, such as chi-square tests and logistic regression, explored associations between variables and identify patterns in postoperative pain management practices.

**Results**:

**Table 1:** Demographic Characteristics of Oral Surgeons

| Demographic Characteristic | Number (%) |
|---|---|
| Age Range | |
| - 30-39 years | 25 (25%) |
| - 40-49 years | 35 (35%) |
| - 50-59 years | 30 (30%) |
| - 60 years and above | 10 (10%) |
| Gender | |
| - Male | 70 (70%) |
| - Female | 30 (30%) |
| Years of Practice | |
| - Less than 5 years | 20 (20%) |
| - 5-10 years | 30 (30%) |
| - 10-20 years | 35 (35%) |
| - More than 20 years | 15 (15%) |

**Explanation of Table 1:**

Table 1 outlines the demographic characteristics of the 100 oral surgeons included in the study. The sample is diverse in terms of age, gender, and years of practice, ensuring representation across different cohorts within the oral surgery community.

**Table 2:** Postoperative Pain Management Practices of Oral Surgeons

| Variable | Number (%) |
|---|---|
| Types of Analgesic Medications | |
| - NSAIDs | 95 (95%) |
| - Opioids | 80 (80%) |
| - Acetaminophen | 70 (70%) |
| Dosage, Frequency, and Duration | |
| - Appropriate NSAID Dose | 85 (85%) |
| - Opioid Limitation (when prescribed) | 60 (60%) |
| Adoption of Multimodal Analgesia | 75 (75%) |
| Factors Influencing Decision-Making | |
| - Patient Age and Health Status | 90 (90%) |

| - Surgical Complexity | 80 (80%) |
|---|---|
| - Surgeon's Experience and Preference | 65 (65%) |

**Explanation of Table 2:**

Table 2 presents the postoperative pain management practices of oral surgeons. The majority of oral surgeons prescribe NSAIDs (95%) and opioids (80%), with a significant proportion using acetaminophen (70%). Regarding dosage, frequency, and duration, a high percentage adhere to appropriate NSAID dosages (85%) and implement opioid limitation practices (60%). Multimodal analgesia approaches are adopted by 75% of surgeons. Factors influencing decision-making include patient age and health status (90%), surgical complexity (80%), and the surgeon's experience and preference (65%).

**Discussion**:

The discussion section aims to interpret and contextualize the results of the study on the current practices and preferences of oral surgeons in postoperative pain management. The diverse demographic profile of oral surgeons in the study reflects a broad representation across different age groups, genders, and years of practice[11-13]. This diversity enhances the generalizability of the findings and provides a holistic understanding of postoperative pain management practices within the oral surgery community. The high prevalence of NSAID usage (95%) among oral surgeons aligns with contemporary trends favoring non-opioid analgesics for postoperative pain control. The substantial adoption of opioids (80%) suggests a balanced approach that recognizes the efficacy of opioids when appropriately prescribed while acknowledging the associated risks. The majority of oral surgeons adhering to appropriate NSAID dosages (85%) reflects a commitment to evidence-based prescribing practices. The implementation of opioid limitation practices (60%) is promising, indicating a growing awareness of the need to mitigate the potential risks of opioid use in postoperative pain management. The substantial adoption of multimodal analgesia approaches (75%) signifies a progressive shift toward comprehensive pain management strategies. This approach, combining different classes of analgesics, aligns with the contemporary emphasis on optimizing pain control while minimizing opioid reliance and associated adverse effects. The prominence of patient age and health status (90%) as a significant factor influencing decision-making underscores the individualized approach to postoperative pain management. The consideration of surgical complexity (80%) reflects a nuanced understanding of the varied pain management needs associated with different procedures. Surgeons' experiences and preferences (65%) highlight the importance of personalized approaches within the clinical decision-making process[14,15].

**Conclusion**:

In conclusion, this study provides a comprehensive examination of the current practices and preferences of oral surgeons in postoperative pain management. The observed trends toward non-opioid analgesics, opioid limitation practices, and multimodal analgesia indicate a positive trajectory in aligning practices with contemporary pain management principles. These findings contribute to the ongoing dialogue on optimizing postoperative care in oral surgery, ultimately benefiting both practitioners and patients.

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