



57. SURGICAL MANAGEMENT OF THE LOWER THIRD MOLAR IMPACTION

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Introduction. The study emphasizes the importance of understanding the complex nature of impacted third molars, their potential complications, and the considerations for their removal in clinical practice.

Aim of study. The thesis aims to analyze the surgical removal of impacted third molars. It evaluates the existing classification and difficulty index of these teeth, discusses factors related to impaction, and assists in decision-making for surgery by understanding the risks and presenting options to patients.

Methods and materials. This retrospective study, conducted from January 2021 to October 2023 at the Dental Imaging Centre in Avidor, Israel, analyzed panoramic and periapical radiographs of 55 patients, aged 16-65, focusing on impacted third molars. It assessed factors like age, gender, location, angulation, position, and impaction level using Winter's and Pell and Gregory classifications. Exclusions included patients under 16, with incomplete records, systemic diseases, craniofacial anomalies, or trauma history. The study mainly addressed angulation, position, and depth of impacted mandibular third molars.

Results. This study involved 55 patients (46% female, 54% male) and examined 175 molars. It analyzed the distribution of third molars by gender and age, with the highest occurrence in the 20-29 age group. The study revealed that as age increased, the number of third molars decreased, and more males had third molars than females. It also categorized 175 third molars into erupted, partially impacted, and completely impacted, noting differences in the mandible and maxilla. Gender-based distribution showed no significant difference. Additionally, 38 teeth had issues like pericoronitis and caries. The study provided insights into the distribution, impaction types, and symptoms of third molars, which is crucial for dental professionals in assessing and managing these teeth.

Conclusion. M3 (third molar) impaction is commonly linked to various oral health issues, leading to recommendations for early removal. The prevalence of associated pathologies varies across studies. Causes include limited jaw space, inadequate skeletal growth, and larger tooth crown size. Dental attrition and dietary habits also play roles in creating space for these teeth. Managing impacted third molars involves decisions about removal timing, surgical techniques, and postoperative care. The complexity of surgery and potential complications, such as nerve injuries and infection, necessitate careful planning and consideration of the dentist's expertise and patient's condition. The risks of leaving impacted M3s are uncertain due to varying incidence rates of complications in studies. Common complications from surgical removal include dry socket, nerve damage, and infection. The relationship between dental arch size and M3 impaction is under-studied, with factors like arch crowding and mandible growth being significant.