



OPEN ACCESS

SUBMITTED 23 March 2025

ACCEPTED 19 April 2025

PUBLISHED 21 May 2025

VOLUME Vol.06 Issue05 2025

CITATION

Rakhmanov Shakhzod Alimovich, Boymuradov Shukhrat Abdulilovich, Khasanov Adkham Ibrokhimovich, & Yusupov Shokhrukh Shukhratovich. (2025). Motivation of Patients with Skeletal Abnormalities of Pathologic Bite to Surgical Treatment. International Journal of Medical Science and Public Health Research, 6(05), 78–82.
<https://doi.org/10.37547/ijmsphr/Volume06Issue05-06>

COPYRIGHT

© 2025 Original content from this work may be used under the terms of the creative commons attributes 4.0 License.

Motivation of Patients with Skeletal Abnormalities of Pathologic Bite to Surgical Treatment

Rakhmanov Shakhzod Alimovich

Clinical Resident, Tashkent Medical Academy, Republic of Uzbekistan, Tashkent, Uzbekistan

Boymuradov Shukhrat Abdulilovich

DSc, Professor, Tashkent Medical Academy, Republic of Uzbekistan, Tashkent, Uzbekistan

Khasanov Adkham Ibrokhimovich

DSc, Professor, Tashkent State Dental Institute, Republic of Uzbekistan, Tashkent, Uzbekistan

Yusupov Shokhrukh Shukhratovich

PhD, Associate professor, Tashkent Medical Academy, Republic of Uzbekistan, Tashkent, Uzbekistan

Abstract: Patients with skeletal malocclusions often first seek treatment from dentists due to complaints of improper occlusion. Some patients with jaw underdevelopment consult otorhinolaryngologists or neurologists with symptoms such as pain and noise in the ear area, temporomandibular joint discomfort, and masticatory muscle pain. These specialists ultimately refer patients to maxillofacial surgeons and orthodontists.

Proper motivation is crucial for patients considering orthognathic surgery, as some may spend years undergoing orthodontic compensation, which often leads to dissatisfaction. Over the past year, 87 patients with skeletal malocclusions have undergone surgical treatment after being motivated by a multidisciplinary team consisting of a prosthodontist, orthodontist, neurologist, otorhinolaryngologist, and maxillofacial surgeon.

Statistical data show that 70–80% of patients choose orthognathic surgery primarily for aesthetic improvements, followed by functional correction, while

10–30% seek treatment to resolve psychological concerns related to their appearance. Among 100 consulted patients, 55 agreed to combined treatment, including dental decompensation and orthognathic surgery. However, 45 patients sought additional opinions, researched complications, or chose alternative orthodontic treatments. Ultimately, 15 of them proceeded with surgical treatment. Additionally, 4 patients were discouraged from surgery by maxillofacial surgeons due to minimal aesthetic or functional benefits.

Keywords: Orthognathic surgery, skeletal malocclusion, patient motivation, orthodontic decompensation, facial aesthetics, maxillofacial surgery.

Introduction: Skeletal malocclusions can significantly impact a patient's quality of life, leading to both functional and aesthetic concerns. While some patients initially seek orthodontic treatment, others present with symptoms related to temporomandibular disorders, nasal breathing difficulties, or chronic headaches. Due to the complexity of skeletal discrepancies, interdisciplinary management is essential to guide patients toward the most effective treatment plan.

Many patients hesitate to undergo orthognathic surgery due to fear of surgical procedures, concerns about postoperative recovery, and uncertainty about aesthetic outcomes. A crucial factor in treatment success is proper patient motivation and education regarding the benefits of combined orthodontic-surgical treatment. This study analyzes the motivation of patients with skeletal malocclusions and the decision-making process leading to surgical

intervention.

METHODS

A retrospective study was conducted among 87 patients who underwent orthognathic surgery over one year. The study examined the reasons patients initially sought treatment, their referral pathways, and the role of interdisciplinary specialists in their motivation.

Data collection included:

- Patient complaints and initial consultation details
- Duration of prior orthodontic treatment and satisfaction levels
- Primary reasons for undergoing surgery (aesthetic, functional, or psychological)
- Percentage of patients who proceeded with surgery after consultation
- Cases where surgery was discouraged due to minimal benefit

RESULTS

Among the 87 patients who underwent orthognathic surgery:

- 70–80% primarily sought aesthetic improvements.
- 10–30% pursued surgery due to functional issues (e.g., chewing difficulties, speech problems, or breathing impairments).
- 10–30% were motivated by psychological concerns related to self-confidence and social acceptance.

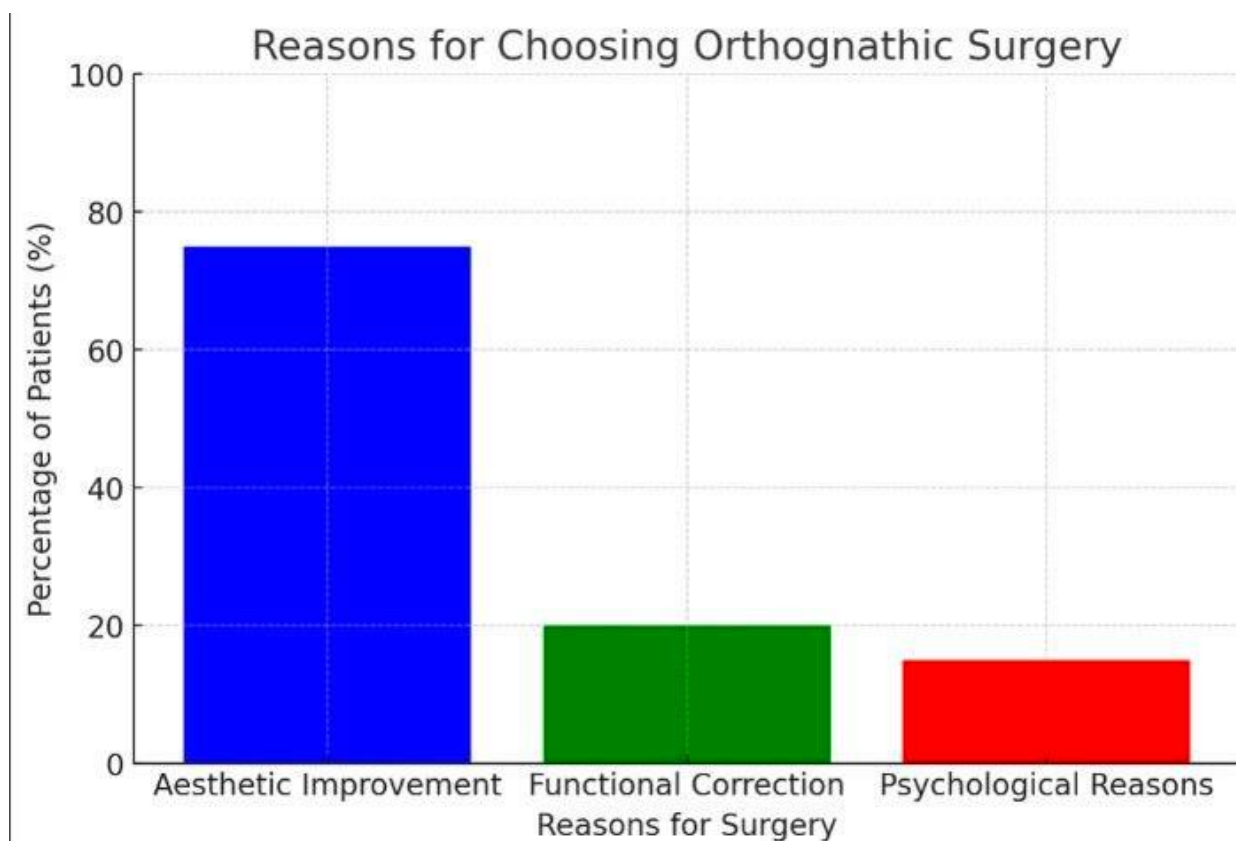


Fig 1: Reasons for choosing Orthognathic Surgery

Out of 100 patients initially consulted:

- 55 patients (55%) agreed to combined treatment involving orthodontic decompensation and surgery.
- 45 patients (45%) hesitated, sought additional consultations, or opted for orthodontic compensation instead.

- Among those 45 patients, 15 eventually proceeded with surgery after further consideration.

- 4 patients were advised against surgery by maxillofacial surgeons due to minimal expected benefits.

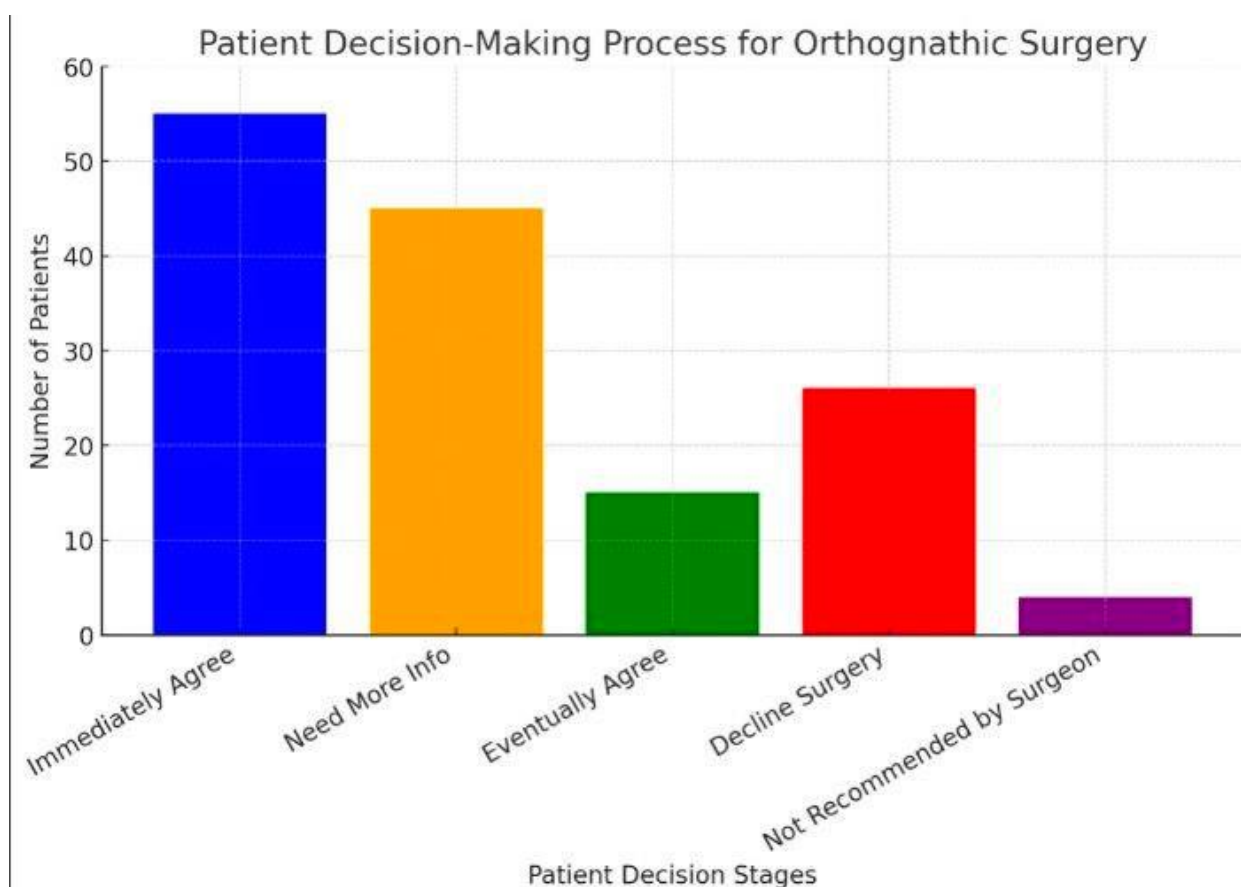


Fig 2: Patient Decision-Making Process for Orthognathic Surgery.

DISCUSSION

The decision to undergo orthognathic surgery is influenced by various factors, including perceived aesthetic improvement, functional benefits, and psychological well-being. Most patients prioritize aesthetics over functional correction, highlighting the importance of facial harmony in self-perception.

Patients who undergo orthodontic compensation alone often experience long treatment durations with suboptimal results. In contrast, those who opt for surgical intervention benefit from comprehensive correction, leading to greater satisfaction. However, concerns about surgical risks, cost, and recovery remain significant deterrents.

The role of a multidisciplinary team in patient motivation is crucial. Collaboration between orthodontists, prosthodontists, neurologists, otorhinolaryngologists, and maxillofacial surgeons ensures that patients receive comprehensive information about their condition and treatment options.

CONCLUSION

Patient motivation for orthognathic surgery is primarily driven by aesthetic concerns, followed by functional and psychological factors. An interdisciplinary approach plays a key role in guiding patients toward informed decisions. Proper education and realistic expectations are essential in ensuring treatment satisfaction. While some patients initially hesitate, many proceed with surgery after thorough consultation and motivation. However, surgical intervention is not always necessary, and individualized treatment planning is critical in achieving the best outcomes.

REFERENCES

- Soldatova L.N., Sachiyon Yu.V., Prokhorova V.V. "The role of motivation in the success of orthodontic treatment of adolescents." *Russian Dental Journal*, 2022; 26(4): 345-353. DOI: 10.17816 / 1728 -2802 -202 2- 26 -4 -34 5- 35 3.
- Solovyova E.S., Rodionova V.A. "Patient motivation strategy. A guide to action for an effective dentist." Educational and methodical manual. St. Petersburg: Science-intensive Technologies, 2023.

"Motivation and Cooperation in Orthodontic Treatment: Analysis of Responses from Adolescent Patients and Their Parents"

"Opportunities for Psychological and Psychiatric Rehabilitation of Adult Patients After Orthognathic Surgery"

"Use of Visual Content to Increase Children's Motivation for Treatment in Orthodontic Practice"

"Treatment of Patients with Skeletal Forms of Distal Occlusion Complicated by Partial Absence of Teeth"

"Elective Orthognathic Treatment Decision Making: A Survey of Patient Reasons and Experiences"

"Patients' Motivations for Treatment and Their Experiences of Orthodontic Preparation for Orthognathic Surgery"

"Patients' Perceptions of Orthognathic Treatment, Well-Being, and Psychological or Psychiatric Status: A Systematic Review"

"Stigma, Body Image, and Quality of Life in Women Seeking Orthognathic Surgery"

"Orthognathic Surgery: Principles & Practice" by Jeffery C. Posnick