Title: **Assessment of Patient Satisfaction and Functional Outcomes in Orthognathic Surgery**

Author Names: Mohammad K Alam , Rana Elbeshbeishy , Huda M Abutayyem , Mohammed G Sghaireen

Abstract: **Background:** Orthognathic surgery is a surgical procedure performed to correct severe jaw misalignments that can affect a patient's facial aesthetics and functional occlusion. While the primary goal of orthognathic surgery is to improve functional outcomes and facial appearance, it is essential to assess patient satisfaction as a crucial aspect of overall treatment success.

Materials and methods: Patient selection: We conducted a prospective study involving 50 patients who underwent orthognathic surgery. All patients had a confirmed diagnosis of severe jaw misalignment, as determined by clinical and radiographic assessments. The surgical procedures performed included maxillary advancement, mandibular setback, or a combination of both, depending on the patient's specific diagnosis. Preoperative orthodontic treatment was provided to align the teeth and prepare the patient for surgery. Patients were evaluated preoperatively and at postoperative intervals of 3 months, 6 months, and 1 year.

Results: Patient satisfaction scores and functional outcomes were as follows: aesthetics of facial profile (1-year post-op): mean score = 4.6, chewing function (1-year post-op): mean score = 4.4, speech function (1-year post-op): mean score = 4.3, and overall satisfaction with surgical outcome (1-year post-op): mean score = 4.5. Objective assessments revealed a significant improvement in occlusion and facial aesthetics. The mean reduction in overjet was 4.8 mm, and the mean reduction in overbite was 3.2 mm. Additionally, the mean postoperative ANB angle improved by 3.7°, indicating a better facial balance.

Conclusion: Orthognathic surgery in our cohort of 50 patients resulted in high levels of patient satisfaction with both functional outcomes and facial aesthetics. Objective measurements also indicated significant improvements in occlusion and facial balance.

Keywords: Cephalometric radiographs; Likert scale; facial aesthetics; functional outcomes; jaw misalignment; orthognathic surgery; patient satisfaction.

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