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## The Comparison of The Quality of Life Between Conventional Orthognathic Surgery and Surgery-first Orthognathic Surgery in Skeletal Class III Deformity Patients

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## Abstract

**Objectives:** This prospective cohort study aimed to compare the quality of life (QoL) of patients with skeletal Class III deformities undergoing either conventional orthognathic surgery (CS) or surgery-first orthognathic surgery (SF) using the Orthognathic Quality of Life Questionnaire (OQLQ) and the Oral health Impact (OHIP-14) tools.

**Methods:** The OQLQ was translated into Thai. Thirty-four patients were enrolled, with 17 in each group according to their orthodontic treatment plans. Patients completed the OQLQ and OHIP-14 assessments on the day before surgery (T1) and at 1 month (T2), 3 months (T3), and 6 months (T4) post-surgery. Data collection occurred from October 2021 to April 2022. Independent sample T-tests and one-way repeated measures ANOVA were used for statistical analysis (p<0.05).

**Results:** At T1, the QoL was significantly lower in the CS group compared to the SF group. The CS group exhibited significant QoL improvements at T2 (OQLQ) and T3 (OHIP-14) compared to T1. The SF group had a lower QoL at T2 but showed significant improvement at T4 (OQLQ and OHIP-14).

**Conclusions:** There was no significant difference in QoL between the two groups after surgery. Both surgical approaches led to improvements in patients' QoL. Thus, the choice of surgical method should be based on appropriate indications and patient-doctor agreement.

**Keywords:** conventional orthognathic surgery, OHIP-14, OQLQ, quality of life, surgery-first orthognathic surgery