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## Skeletal and dental responses to orthognathic surgical treatment

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### ABSTRACT

This retrospective cephalometric study analyzed dental changes that occurred postsurgically in relation to skeletal stability or instability in a group of 18 orthognathic surgical patients. All surgeries were accomplished in the mandible. In addition, the amount of tooth movement required to complete treatment from surgery to deband and the amount of postsurgical skeletal change was compared between subgroups of skeletal Class II and Class III patients. Also, presurgical skeletal and dental changes were correlated with changes postsurgically. In the entire sample, patients who experienced postsurgical stability in SNB angle required significantly more mandibular incisor linear repositioning than those who experienced instability. Also, patients who experienced instability in anterior facial height required significantly more upper and lower incisor angular repositioning than those who experienced stability. No significant differences could be found when comparing the amount of tooth movement from surgery to deband for the subgroup of skeletal Class II and Class III patients. The Class III patients exhibited more change in mandibular plane postsurgically than the Class II patients. No significant correlations were found between presurgical and postsurgical changes in skeletal and dental parameters in the entire sample.

**KEY WORDS:** Orthognathic surgery, Tooth movement, Skeletal changes, Dental changes.

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