

**Conclusions:** We recommend the use of 3D software and CAD/CAM surgical splints in this type of surgery, as they have demonstrated in our experience the good outcomes achieved.

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### Contemporary orthognathic preparation for the orthognathic surgery: do we have to need the surgical wire for 4 weeks before the surgery?

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**Background:** In orthognathic surgery, traditionally, we know that the stability wire need to be prepared in at least 4 weeks before surgery, so does passive state of stability wire when the impression for surgical splint taken (generally, 1–2 weeks before surgery). Otherwise, recently, two-jaw surgery with minimal orthodontics or before the orthodontics is preferred. Even, two-jaw surgery without orthodontics is reported.

**Objectives:** We do a study about the clinical needs of the surgical wire for 4 weeks before the surgery and how it affects the postoperative stability.

**Methods:** We compared the surgical wire for 4 weeks before the surgery with other groups, which were cases with rectangular wire, nickel titanium and none (does not proceed orthodontics). We studied about 174 patients who underwent two-jaw surgery for correction of class III malocclusion at the Department of Oral and Maxillofacial Surgery, Pusan National Univ. Dental Hospital between November 2013 and July 2015. We compared two cephalograms between postoperative and 6–12 months after surgery about FH-palatal, FH-occlusal, FMA, SNA, SNB and so on in the lateral cephalograms.

**Findings:** Any groups do not have significant difference than other groups.

**Conclusion:** Four weeks period for stability does not offer a better result, we could drop the stability period which increase the treatment period and needless surgical wire-making course.

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### Nine years follow-up after double-jaw surgery for skeletal class III malocclusion correction: a case report

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**Background:** Orthognathic surgery may be indicated to one-fourth Class III malocclusion patients at the completion of active growth. However, it presents some limitations due to the possibility of incomplete surgical success or of postsurgical relapse.

**Objectives:** This paper aims to present a nine years follow-up of a skeletal Class III 17-year-old male patient with midface deficiency, mandibular excess and face asymmetry who underwent double-jaw surgery with a maxillary advancement and mandibular repositioning.

**Methods:** The treatment initiated with presurgical orthodontic alignment and further LeFort I advancement and mandibular repositioning to correct mandibular asymmetry. Patient was followed

through nine years, and facial, occlusal and cephalometric relationships were accessed.

**Results:** Facial and occlusal relationships were improved. Maxilla moved forward and mandible was repositioned. Intraorally, negative over jet was corrected and Class I occlusal relationship was achieved. The nine years follow-up showed the maintenance of facial and occlusal balance, agreeing with ANB angle values, pre (–4.6), post (1.99) and nine years after orthognathic surgery (2.5).

**Conclusion:** Double-jaw surgery seems to be a stable procedure to correct Class III skeletal malocclusions. However, some factors such as the amount of advancement and type of fixation appears to influence negatively the stability.

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### Simultaneous modified Le Fort III/Le Fort I osteotomies: a treatment option for midface hypoplasia in nonsyndromic patients

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**Background:** Le Fort III osteotomy represents the main technique for midface hypoplasia correction in syndromal and non-syndromal patients in order to improve midface advancement and achieve better aesthetic and functional results.

**Objectives:** To present a treatment of a nonsyndromic male patient with severe midface hypoplasia, concave profile and Class III malocclusion treated with Le Fort III surgery in association with Le Fort I advancement osteotomy followed by mandibular repositioning.

**Methods:** The treatment initiated with presurgical orthodontic alignment and further orthognathic surgery with both Le Fort I and Le Fort III advancement and mandibular repositioning to correct mandibular asymmetry.

**Results:** The maxilla moved forward and downward and midface projection improved. The mandible anteroposterior relationship was maintained, the laterognathism was corrected and an orthognathic profile and Class I occlusal relationship were achieved.

**Conclusions:** Development of the simultaneous Le Fort III and Le Fort I osteotomy technique improved stability and facial aesthetics, increasing its indication for nonsyndromic skeletal Class III patients with severe midface deficiency.

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### Management of dentofacial deformities and facial asymmetry with orthognathic surgery concomitant alloplastic temporomandibular joint replacement whit stock prosthesis

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Temporomandibular joint (TMJ) disorders or pathology and dentofacial deformities (DFD) commonly coexist. The TMJ pathology may be the causative factor of the jaw deformity or develop as a result of the jaw deformity. Total alloplastic replacement is indicated in TMJ ankylosis, congenital