

## Bone Flap Technique as a Conservative Alternative Before Implant Rehabilitation

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## Abstract

**Introduction:** Sufficient bone quality and sufficient amount of bone surrounding implants is mandatory for having long-term satisfactory treatment outcome. Therefore, alveolar bone surgeries should be done conservatively as much as possible considering following potential implant rehabilitation.

Impacted tooth removal is one of the most common oral surgical procedures performed. Special attention has to be paid to save alveolar bone and related anatomic structures during impacted tooth extractions especially if implant treatment is sufficient for following prosthetic rehabilitation. In conventional techniques, a large bone window could be necessary for enough access to impacted teeth that negates healing process and reduces the bone volume. In cases with intact and relatively thicker vestibular compact bone, a bone flap design can be used with converging osteotomy lines made with piezosurgery tips which allow proper stabilization after extraction.

A 46-year-old female patient was admitted to our clinic because of her mobile teeth and non-aesthetic appearance. Intraoral and radiographic examinations revealed bone loss due to chronic periodontitis and an impacted premolar tooth. Full-mouth rehabilitation with hybrid prosthesis over 8 implants has been planned. We removed the impacted premolar tooth which lays on the area planned to be implanted conservatively by "bone flap technique". Uneventful healing was observed and after four months mandible and maxilla were rehabilitated with 8 implants and immediately loaded.

Preserved buccal bone plate acts as a barrier based on guided bone regeneration techniques and prevents soft tissue migration into cavity that avoids surgical bone atrophy. Treatment of impacted teeth or cysts with traditional technics can cause big bone defects and if dental implants are planned to the site, detailed augmentation procedures like titanium mesh and autogenous bone blocks are required which increase the costs and risk of complications such as infections and wound exposure. This technique can be a good conservative solution for proper cases.

**Keywords:** Bone flap technique.