

Description of the procedure: The hopeless prognosis of teeth #11 and #12 requiring extraction was explained and she agreed, but wished for a fixed replacement. She was not interested in a fixed prosthesis utilising adjacent teeth as abutments. Hence a treatment plan consisting of establishing periodontal stability followed by orthodontic extrusion of the hopeless teeth to the point of extraction and replacement with dental implant supported prosthesis was agreed upon (Salama et al. 1993). Focused plaque control instructions followed by staged periodontal therapy including the surgical phase was performed and once periodontally stable, teeth 11 and 12 were subjected to endodontic treatment. The teeth were then orthodontically extruded to the point of extraction together with simultaneous proportional incisal reduction to facilitate bone deposition. Following augmentation of the prospective implant site, the extrusion was terminated and the teeth stabilised. After 3 months, the teeth were extracted and immediate implants placed at 11 and 12 sites with good primary stability. Four months post implant placement, definitive implant supported crowns were inserted.

Outcomes: Controlled orthodontic extrusion led to bone apposition around the teeth with advanced periodontal bone loss, thus facilitating replacement of unaesthetically extruded and hypermobile 'hopeless' teeth with dental implants. After 8 years, the restoration is still stable and in function with healthy peri implant support and acceptable aesthetics.

Conclusions: With properly executed interdisciplinary care, periodontally involved hopeless teeth can be utilised for implant site development using sound orthodontic and periodontal principles. Meticulous supportive care has facilitated long-term dental implant success over a period of eight long years.

PC403 | Lateral Window Sinus Lift and Bone Augmentation With Xenograft—A Clinical Case

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Background: The rehabilitation of an edentulous space with implants is often constrained by limitations in the quality and quantity of bone, necessitating the need for grafting. This case highlights a sinus lift with lateral window approach and bone augmentation using xenograft of an edentulous space in the left maxillary arch.

Description of the procedure: A 48-year-old healthy male sought dental implant treatment for a missing tooth, with no significant medical history or smoking habit. Intraoral examination revealed, missing tooth 26, full-mouth plaque score (FMPS) <10%, and shallow non-bleeding periodontal pockets. Radiographic assessment showed inadequate bone height around the missing tooth, confirmed by cone beam computed tomography (CBCT) as <3 mm. Treatment plan was for sinus lift-bone augmentation followed by implant placement. After intra-oral disinfection and local anaesthesia, a mid-crestal incision was made along the ridge, with vertical releasing incisions. A full-thickness flap was elevated, and a lateral window was outlined, drilled, and carefully removed to avoid damaging the Schneiderian membrane. The sinus membrane was elevated,

xenograft material (Endobon) was placed and condensed, followed by covering the bone window with a resorbable collagen membrane (OsseoGuard). The flap was closed with Dafilon 5/0 simple interrupted sutures. Postoperative care instructions and medications were prescribed.

Outcomes: At the follow-up, both soft and hard tissue healing progressed without complications. Radiographic evaluation revealed uniformity in graft and bone, achieving ~6 mm of additional vertical bone gain. The patient is now scheduled for the next stage of implant placement in 6 months.

Conclusions: In cases of highly pneumatized sinuses, simultaneous implant placement may not be feasible due to insufficient bone volume. When bone height is <3 mm, a lateral sinus lift is recommended before implant placement and this approach has shown favourable outcomes.

PC404 | Fence Technique for Guided Bone Regeneration in the Maxilla: A Case Series

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Background: The Fence technique, first introduced by Mauro Merli in 2013, can be applied for vertical and horizontal guided bone regeneration (GBR). It involves the use of a titanium osteosynthesis plate and a collagen membrane, creating a physical barrier around the bone graft. It has been reported as a reliable treatment for managing bone defects that hinder the placement of implants in the ideal 3D position.

Description of the procedure: Five patients (ages 27–67 years) presented localised (3 cases) or extensive bone loss (2 cases) in the anterior maxilla. All patients were systemically healthy, except one on antihypertensive medication, and only one was a smoker.

Following local anaesthesia administration, an incision was made along the edentulous ridge, which in most cases was combined with intrasulcular and releasing incisions. This approach allowed for the elevation and release of a full-thickness flap. One or two osteosynthesis plates were fixed with screws, and a bovine xenograft was applied around them. The xenograft was covered with collagen membranes fixed with pins. The flap was released of tension and sutured using a combination of horizontal mattress and simple stitches. After 6–7 months of healing, implants were placed, followed by second-stage implant surgery 3–4 months later. Then 2–4 months thereafter, implant-supported prosthesis were applied.

Outcomes: This technique maintained the space necessary for achieving a normal bone contour of the maxillary arch. Bone volume remained stable and allowed aesthetic results in 4 out of 5 cases, after a follow-up of 1–6 years. Additionally, this approach avoids the collection of autologous bone, reducing morbidity. Only one post-surgical complication occurred (membrane exposure), which did not compromise the overall success of the treatment.

Conclusions: The present case series suggests that the fence technique effectively corrected bone defects, enabling