

Replacement of Missing Anterior Teeth in the Developing Dentition

There are several options for successful replacement or masking of the missing teeth



Orthodontic Space Closure,

Fixed or Removable Prosthetics

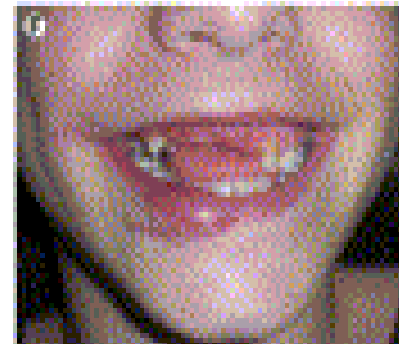
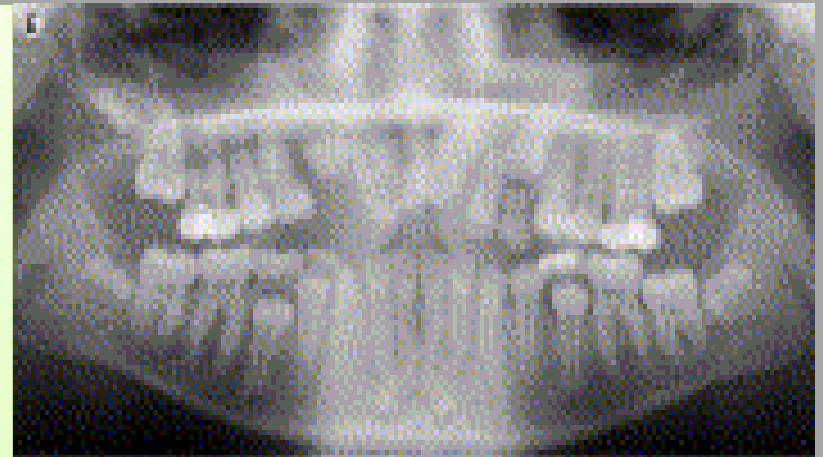
Osseointegrated Dental Implants

Tooth Autotransplantation

Auto-transplantation: The Vital Option for Replacement of Missing Anterior Teeth in the Developing Dentition

Treatment Plan:

- Autotransplantation and orthodontic space closure





Teeth in the floor of the nose, severely displaced orthodontic appliances, missing buccal plate, and de-gloving injury of the anterior maxilla.



- The right piriform rim of the nose and the extent of the bone loss can be clearly seen.
- The erupting right maxillary cuspid .
- Deep perioral lacerations.



- Panoramic radiograph took immediately.
- Excellent bone height in the anterior maxilla noted.
- The right and left mandibular premolars have open apices, indicating a good opportunity for revascularization of the pulp chamber.



Initial osteotomy for transplant site, created using implant drills (*Nobel Biocare*).



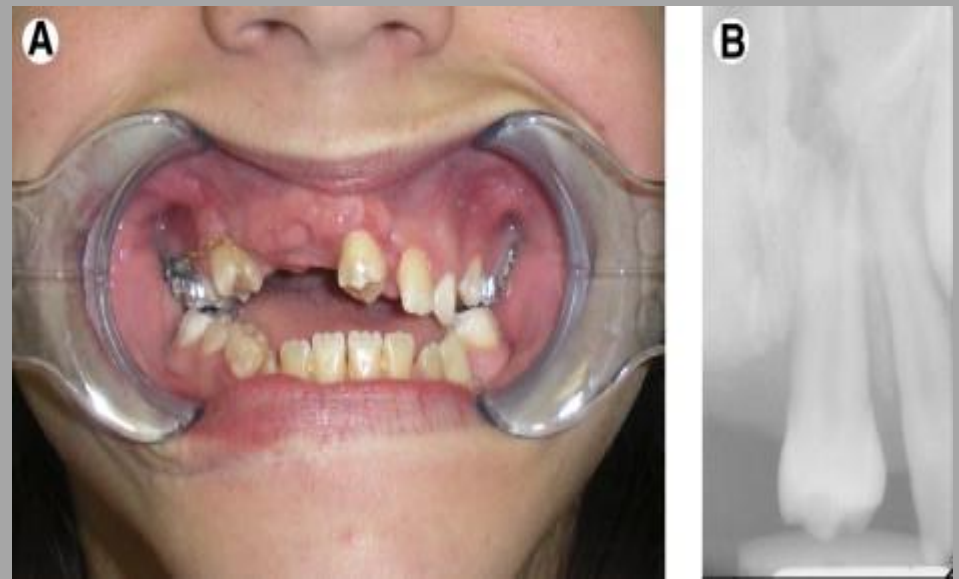
- After extraction of the left mandibular **E**.
- The left mandibular **5** was exposed. Care had been taken to preserve as much of the follicle as possible.



Large amount of follicle remains at the cervix.



One week after transplant surgery.



- One month after transplant. Gingival healing.
- Radiograph taken after **one month**, demonstrating an open apex and no root resorption.



- **One week** follow-up appointment after the second transplant.
- Malposition of the right transplanted tooth and the better position of the left transplanted tooth after orthodontic movements is noted.

- Radiograph **1- week** after second transplant..
- The open apices of the transplanted teeth are noted.
- The left transplanted tooth had begun to have some canal obliteration.



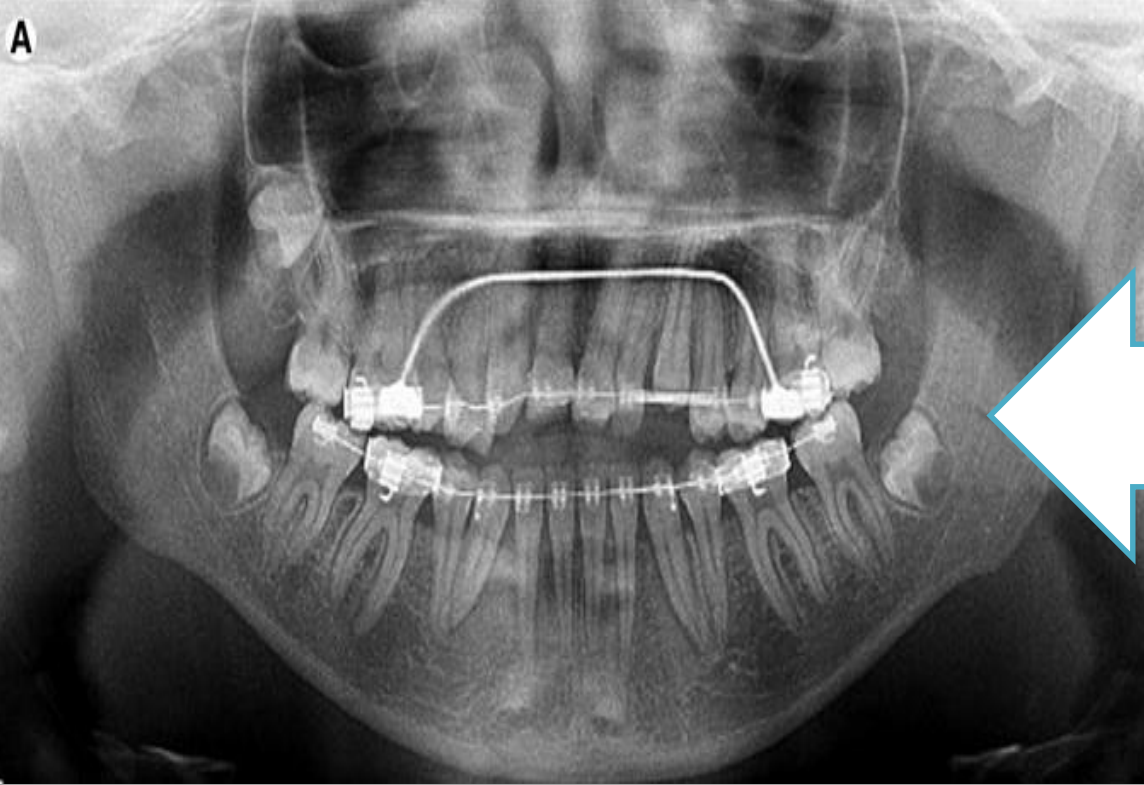
- Transplanted teeth before prosthetic reshaping.



- Facial view of reshaped teeth.
- Gingival re-contouring to create symmetry will be performed in the future.



- Occlusal view after prosthetic reshaping.



- Radiograph taken 3 months before debonding.
- Some canal obliteration noted with the transplanted teeth.



- The anterior open bite persists.
- The discoloration of the repositioned cuspid is evident.
- Tooth shape and color corrections are planned in the future.



Restoration of Congenitally Missing Lateral Incisors After Orthodontic Treatment

- Patient report :



- Treatment Plan:



In situations where it is preferable to leave or create space for the lateral incisor, several restorative options are available. One such option is **the metal resin-bonded bridge**. This restoration is conservative, but presents with a variety of problems, such as metal show-through and bond failure.⁴ **A traditional fixed partial denture (FPD)** may also be appropriate in cases where teeth are already heavily restored, but in younger patients, this is usually inappropriate. Similarly, implant-supported restorations may also be planned, but consideration must be given to root position of adjacent teeth, bone architecture, and implant size.⁵ Removable prostheses are generally less well accepted owing to bulk, movement, and food entrapment.

An intracoronal fixed prosthetic option for conservative restoration of the missing maxillary lateral uses a **fiber-reinforced composite (FRC)** FPD framework supporting a composite resin or ceramic veneer.

Treatment Steps :



Preparation design consists of proximal boxes and lingual preparations with grooves centered in the lingual fossae.



- The prosthesis consist of a fiber-reinforced composite framework supporting a separate porcelain veneer.
- Each component has a unique path of insertion.

Treatment Steps :



Try-in of FRC FPD restorations



Final result at 7-year follow-up



Lateral Substitution in Case of Missing Maxillary Central Incisor



Maxillary left central incisor of a 12-year-old boy was traumatically avulsed



Maxillary left lateral incisor restored with composite resin to simulate a central incisor



Brackets placed on maxillary central “incisors”



Central diastema closed through an open coil spring.
(This is critical to not shift the maxillary midline)
Patient can now be treated as if he is missing a lateral incisor



Post-Traumatic Implant-Supported Restoration of the Anterior Maxillary Teeth Using Cancellous Bone Block Allografts



Preoperative clinical view

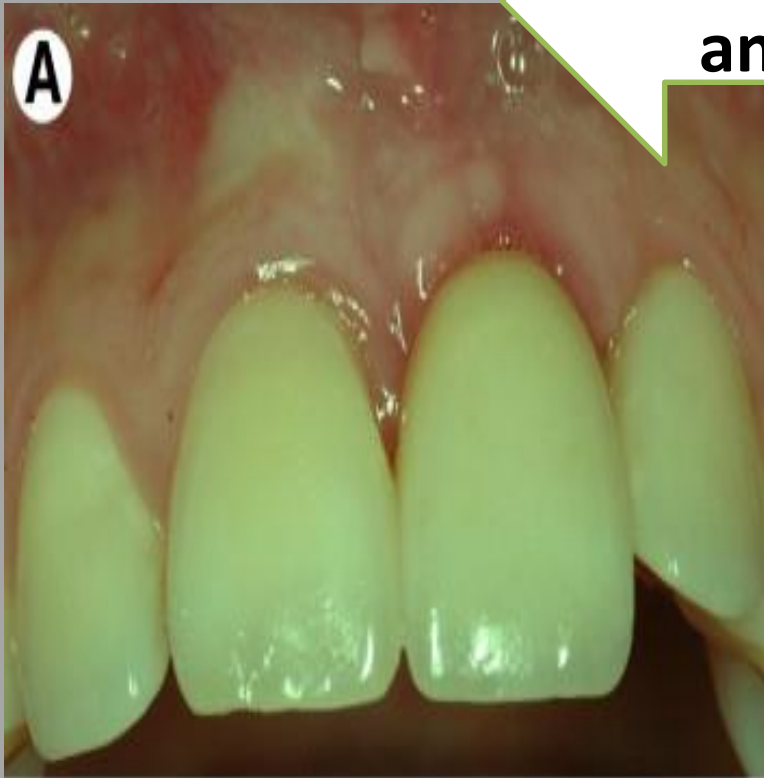


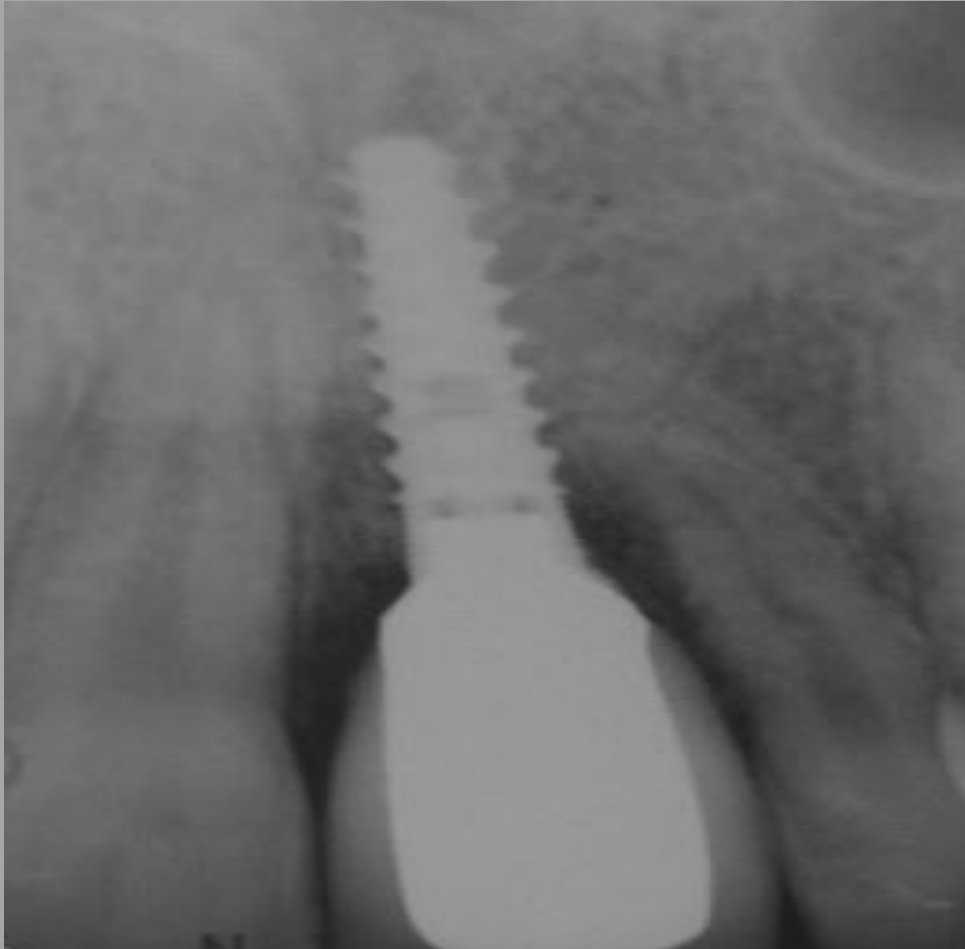
The graft is fixed in place to augment the anterior maxillary alveolus.



Exposure of graft at 6 months

**Final Result: anterior
and occlusal view**





Follow-up
radiograph at 46
months.

THANK

YOU