Immediate Implant Placement: Diagnosis, Treatment Planning and Treatment Steps for Successful Outcomes

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The most important step in treatment planning is determining the prognosis for the dentition and, in particular, prognosis for the tooth in question.

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ADVANTAGES OF IMMEDIATE PLACEMENT

1. Preservation of bone surrounding the tooth
2. More ideal implant positioning
3. The total treatment time is decreased.
4. The number of surgical procedures is reduced.
5. Soft tissue contours and height are better preserved in esthetic zones.
6. Better acceptance of the treatment plan by the patient.
7. The opportunities for osseointegration are better

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Clinical Assessment

- Absence of Pathology
- Socket Integrity
- Soft-Tissue Health and Aesthetic Contours
Treatment steps

- Extraction
- Site Selection
- Osteotomy Preparation
- Implant Insertion
- Wound Closure
Care must always be taken not to damage the labial plate, which is often the most fragile in the anterior region.
Extraction

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Site Selection
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Site Selection

• The aim is to seal as much of the socket as possible with the implant without perforating the labial or the lingual plate and without damaging any of the adjacent teeth.
Osteotomy Preparation
• **Low-Density Bone**
implant may be inserted without any further development of the osteotomy. If excessive resistance is met during the insertion of the implant, the implant should be unscrewed and inserted after partial tapping of the threads.

• **High-Density Bone**
the bed for the implant must be formed completely. This may involve the use of any hand reamers and bone taps required by the implant system that is being used.
Implant Insertion

- Implant should be inserted below the bony crest (1.5mm)
- Critical bony gap is 0.5 to 1.5
Wound Closure

• **Vascularised Pedicled Flaps**
  1. The palatal pedicled flap
  2. The labial coronally advanced flap

• **Free Non-Vascularised Grafts**
  1. Connective tissue grafts
  2. Composite
Tooth has been extracted. Arrow points to socket.
Osteotomy has been prepared in palatal aspect of extraction socket.
Implant has been inserted into osteotomy and a 4 mm healing abutment has been placed onto the implant. Arrow points to gap between mucosal tissue and healing abutment. Tissues sutured with no attempt to advance flap over bovine bone particles.
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