IMMIDIATE EXTRACTION IMPLANT PLACEMENT - A CASE REPORT

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Conventional implant therapy may take a period of 1 to 2 years from the start of treatment to the completion of the restoration. In contrast, immediate implant placement takes as little as 3 to 6 months with the additional benefit of reducing alveolar bone resorption, patient morbidity, and expense. A female patient who came with the complaint of mobility and discoloration with upper right maxillary central incisor was given an implant after immediate extraction. After six months permanent restoration was given. This case report of immediate implant placement into an extraction socket shows the success of such procedure

Keywords: Aesthetics, extraction, immediate implant.

The complete dental solution is a holistic approach that recognizes as a significant factor for the psychological well-being of the patient and provides a healthy appearance as well as functional restoration.[1]

The increased need and use of implant can be attributed several factors. [2]

1. Aging population living longer
2. Tooth loss related to age
3. Consequences of fixed prosthesis failure
4. Anatomical consequences of edentulism
5. Poor performance of removable prosthesis
6. Consequences of removable partial dentures
7. Psychological aspects of tooth loss and needs and desires of aging baby boomers
8. Predictable long term results of implant supported prosthesis
9. Advantages of implant supported prosthesis
10. Increased public awareness

With modern techniques and the materials, anterior restorations can frequently be fabricated to meet the patient's expectations. The greatest benefit of using implants in the anterior esthetic zone is-

1. The avoidance of unnecessary preparation of non restored teeth adjacent to an implant.[3]
2. The goal of the anterior implant restoration is to simulate the appearance of a natural tooth.
3. The benefits of immediate implant insertion after tooth extraction are related to an improved preservation of soft tissue drape and the bone architecture, compared with their collapse after tooth extraction.
4. As a result, bone augmentation and soft tissue grafts may be avoided. The procedure also reduces number of surgeries, which may decrease the cost to the patient. [4]

Although Implant being the choice of restoration for edentulous regions there is a range of conditions that are associated with or thought to be associated with increased risk of implant failure-

1. Tobacco smoking has been shown to increase the risk of implant failure.
2. Active chemotherapy.
3. Disphosphonate therapy.
4. Ectodermal dysplasia.

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5. Erosive lichen planus.
6. Type 2 (late-onset) diabetes, especially when uncontrolled.
7. The placement of implants in severely resorbed maxillae.[4]

Immediate loading of implants into fresh extraction sockets has the advantage of decreasing the period of healing, reducing the resorption of the alveolar bone, and achieving optimal esthetic results. This case reveals the clinical success of immediate loaded single-tooth implant placed in fresh extraction site.

Case Report

Following an accident, the 26-year old female patient complained of mobility discoloration and pain with the right maxillary central incisor. The radiographic examination of the tooth revealed a horizontal fracture that was non restorable. The patient had no significant medical history. However, she chose not to use the removable or fixed partial dentures due to established disadvantages.

Following extensive discussion with the patient, informed consent was obtained for implant therapy.

Immediate extraction implant treatment was scheduled to address esthetic and psychological needs of the patient as well as elimination of the fractured tooth.

The tooth was atraumatically extracted using periotomes to maintain the cortical and interseptal bone. A Flap with releasing incisions was chosen so that the area could be thoroughly inspected. No bone defects such as fractures, fenestrations and dehiscence's were present.

After examination of this socket a Uniti implant of 4.3mm diameter was selected at a length of 13mm.

The implant drills were then introduced in sequence into the extraction site to create an osteotomy of the desired dimension.

Along with implant placement a gingiva former

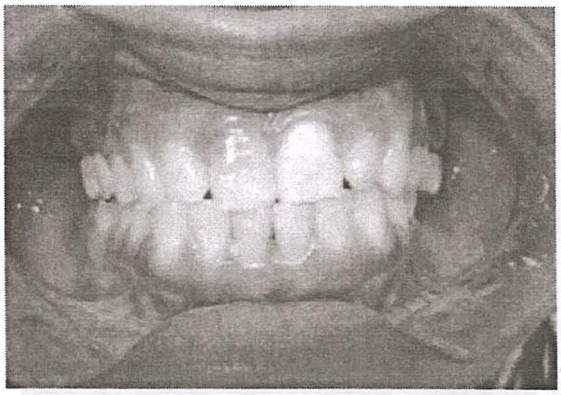


Fig. 1: Pre-operative picture showing disclolouation with upper right central incisor.



Fig. 2: Iopa taken for upper left central incisor.

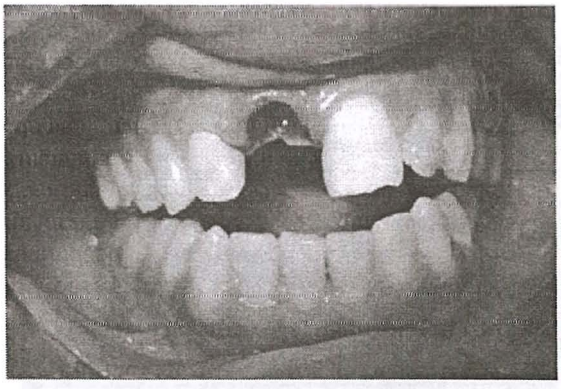


Fig. 3: Extraction of upper right central incisor.

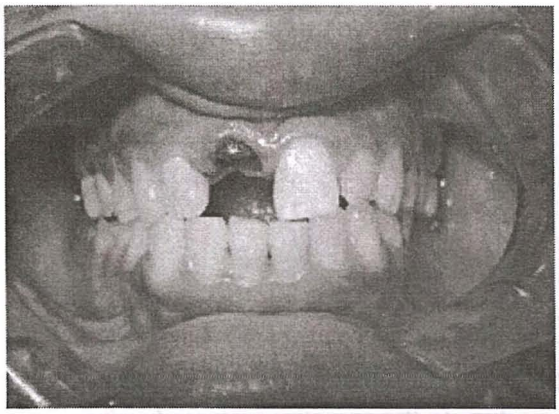


Fig. 4: Implant placed.

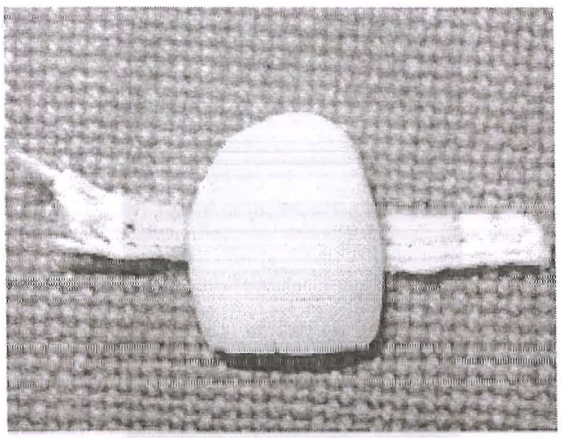


Fig. 5: Maryland bridge with patients own tooth.

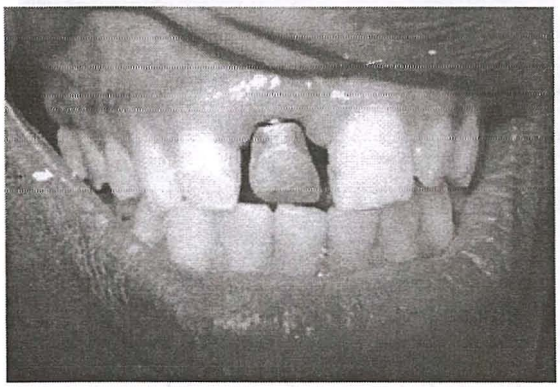


Fig. 6: Temporary restoration.

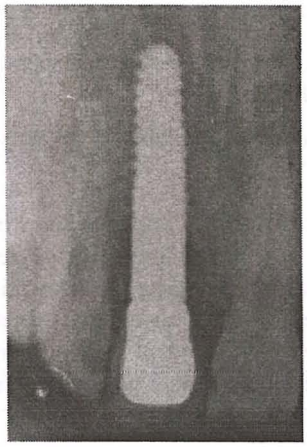


Fig. 7: Metal try in.

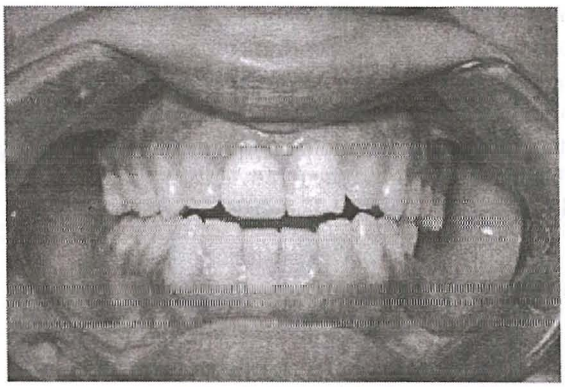


Fig. 8: Permanent crown.

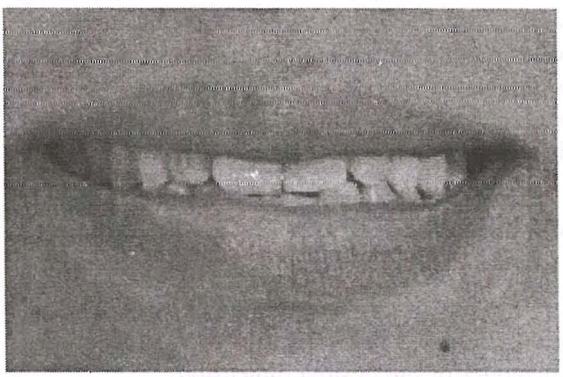


Fig. 9: A fully restored content patient.

was placed to avoid collapses of the papilla and provide a good emergence profile and prevent black triangles in the future.

Temporary restoration was given using her own natural extracted tooth as crown. The tooth was cleaned, bleached restored and prepared with ribond fiber reinforced dental splint material as a Maryland bridge. The patient had this temporary restoration for four months after which impressions were taken to give permanent restoration. A metal try in was done before and later a ceramo-metal crown was placed over the abutment. The patient was delighted with the restoration.

References

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DR. SAMRAJ AWARDED DENTISTS OF THE YEAR 2008-09



Dr. T. Samraj, Secretary & Treasurer of Pierre Fauchard Academy was selected as the "Dentist of the year 2009", by the Indian Dentist Research and Review. The Award was presented on Saturday 08-08-09 at NIMHANS, Bangalore by Padma Bhushan Dr. Anil Kohli, President of the Dental Council of India.