# **Immediate Implant Placement in Fresh Extraction Socket**

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#### Introduction

ccording to the traditional protocol 3-4 months of healing period is required for the extraction socket to consolidate and form new bone. If due to any inverd issues arising during the healing phase the hard and soft compromises are noticed which further delays the implant placement to few months to a year. In order to overcome the above challenges of the hard and soft tissues, patience acceptance along with improved esthetics and function immediate placement in fresh extraction socket is been preferred.

# Case Report

A 23 year old female visited the clinic with a chief complaint of the fractured upper tooth due to trauma. Clinical and radiographic examination revealed fractured tooth with unfavorable prognosis. The patient was given the detailed status of the present tooth condition and future prognosis of the tooth.

After through discussion considering all restorative option of the tooth, and the esthetic demand immediate implant placement in the fresh extraction socket and early loading was planned. Pre Surgical evaluation with radiograph with IOPA (Figure 1)

and OPG was done for appropriate planning was done.

After through planning endosseous implant Myriad Smart tapered self threaded of size 3.8\*13mm was selected. Following the administration of local anesthetic agent lignocaine 2% with 1:100000 epinephrine the fractured tooth was atraumatically removed .( Figure 2 ) .The fresh extraction socket was examined for any osseous defect. All bony walls were intact, the socket was mechanically debrided and irrigated with normal saline. A 2 mm purchase mark was marked in the palatal

### Abstract

This case report describes extraction of a hopeless tooth s followed by immediate implant placement of a dental implant in the freshly extracted socket. The implant placement into the fresh extraction socket reduces the treatment time, cost, preserves hard and soft tissue architecture and an increased comfort of the patient. This article describes the procedure for immediate implant placement in fresh extraction socket and early loading.

wall followed by sequential drilling (Figure 3) till diameter 3.8mm and length 13 mm was done and implant was placed in the prepared osteotomy in socket with an insertion torque of 35Ncm.(Figure 5)

Immediate chair side temporary was fabricated with composite 3M ESPE shade A2. Appropriate antibiotic was prescribed AMOXICILLIN 500 mg TDS FOR 3 days and analgesic IBRUFEN 800 mg every 6 hourly was given. Patient was asked for a follow up after 10,21,36,45 days .After 12 weeks of healing final IOPA along with CBCT scan was taken to confirm the healing . (Figure 6) .

An impression with A-Silicone honigum DMG chem.-pharm.Fabrik, Germany was taken and sent to the laboratory for the fabrication of CERCON, Zirconia crown (Dentsply, Ceramco, York PA). Final cementation of the crown was done 3M ESPE RelyX luting. (Figure 7) cement and follow up was done 6,12,24,36,48, months subsequently stable and healthy hard and soft tissue was noticed during these follow ups. Figure 7

## **Discussions**

Immediate implant placement in fresh extraction socket and early loading is a good treatment option with a success rate to 65-90%. The clinician may opt for immediate or early loading when the insertion torque is more than 35Ncm, bone can accommodate an implant with length 13 mm, or 3mm apical to the extraction socket in the native bone, if the diameter of the implant closely matches the mesiodistal width of the socket. If the jumping distance in the extraction socket is more than 2mm then it should be grafted with the slow resorbing graft material of choice. \* 10.Bruxer patients are contraindicated for the immediate loading.\*7,11. Dental implant placed in fresh extraction sockets have the similar success rate as that of the healed site. 5\* Hence immediate implant placement reduces the visit and offers pleasant esthetic solutions.

## Conclusion

This case report demonstrate and efficient way rehabilitation. This procedure is still technique and case sensitive but with the innovation in the implant dentistry with self tapping implant and restorative solution we can extend our services to our patients in regards to time, comfort and cost management.

#### References

References are available on request at bhasin.abhijeet@gmail.com

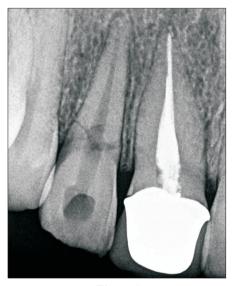


Figure 1



Figure 2

# **Bhasin : Immediate Implant Placement in Fresh Extraction Socket**

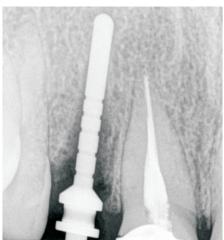


Figure 3



Figure 4



Figure 5



Figure 6

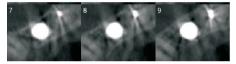


Figure 6



Figure 7 Post Cementation of Zercon Crown

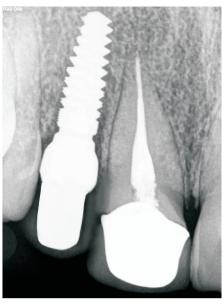


Figure 8 Four Year Follow up X Ray Showing
Stable Bone Level