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"CHANGE IN SMILES- ROLE OF PROSTHODONTIST AND IMPLANTOLOGIST" A CASE SERIES.

¹ Satyendra Kumar K

¹Reader

² Durga Prasad G

² Reader

ABSTRACT: According to a very popular belief 'the loss of teeth is always traumatic'. The latest improved techniques of dental surgery, pain related problems are reduced, other important problems of the loss of teeth are generally related to the inability to chew desired foods and esthetics to move socially. This is where the replacement specialist i.e. prosthodontist and implantologist comes in the picture. This presentation showcases a case series of 10 patients who required the prosthodontist and implantologist intervention to provide a much desired change of smile.

KEYWORDS: Change In Smile, Dental Implants

INTRODUCTION

According to a very popular belief 'the loss of teeth is always traumatic'. The latest improved techniques of dental surgery, pain related problems are reduced; other important problems are inability to chew desired foods and esthetics to move socially¹. This is where the role of Prosthodontist and implantologist comes in the picture. This presentation showcases a case series of 10 patients who required the Prosthodontist and implantologist intervention to provide a much desired change of smile in addition to the services of oral surgeon ^{1,2}.

The first 5 cases required change of smile for loss of teeth due to trauma. The prosthodontist's advice was immediately sought after trauma for the replacement of the teeth. These cases shows how an early intervention of the Prosthodontist and implantologist changes the treatment out come for the betterment of the patients. The patients were aged from 20 years to 40 years.

The next 5 cases required change in smile as they lost their teeth due various diseases in their life time and wanted a permanent solution for the same. The patients were aged from 45 years to 60 years.

The case series includes 10 cases of:

- Full mouth rehabilitation with implants using 12 implants;
- Full maxillary rehabilitation with 10 implants;

- Replacement of maxillary and mandibular posteriors-contralateral sides using 4 implants;
- Replacement of maxillary and mandibular posteriors –same side using 5 implants;
- Different cases of replacement of maxillary and mandibular anteriors using 2-4 implants.

Case 1

A female patient by aged 48 years came to our trauma and emergency department with multiple bruises due Road Traffic Accident (R.T.A.)(Fig.1A). The initial assessment revealed loss of maxillary three anterior teeth-11,12, and 21. Patient was more conscious about her smile in the future. She was treated with three *Bio-horizon internal hex immediate implants*³ along with removal of remnant root stumps.

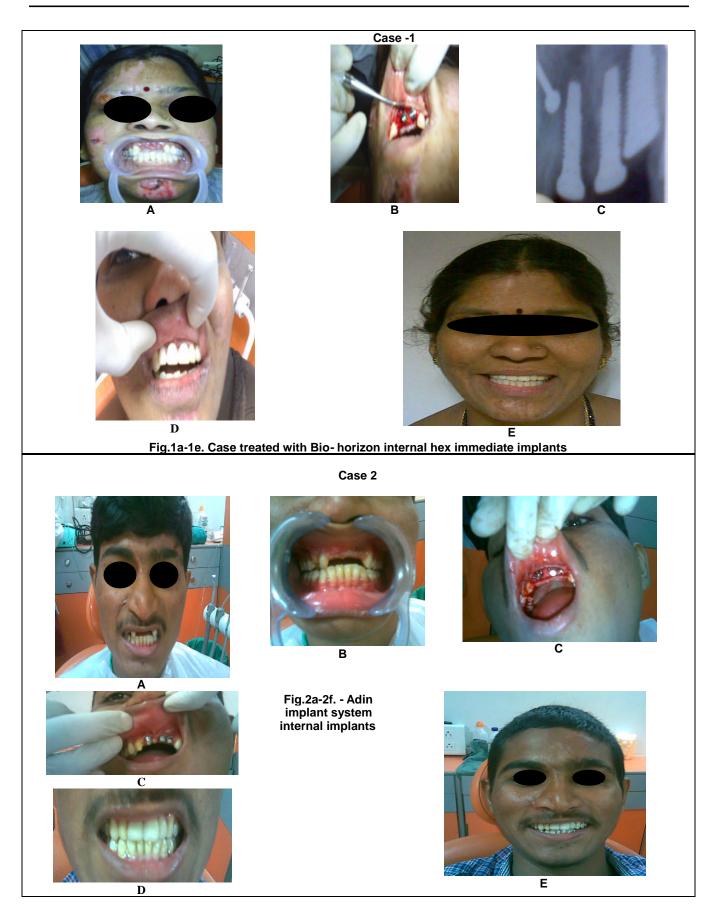
Subsequently she received resin bonded fixed temporary for a period of four months. After four months she was given cemented individual crowns (Fig.1E)

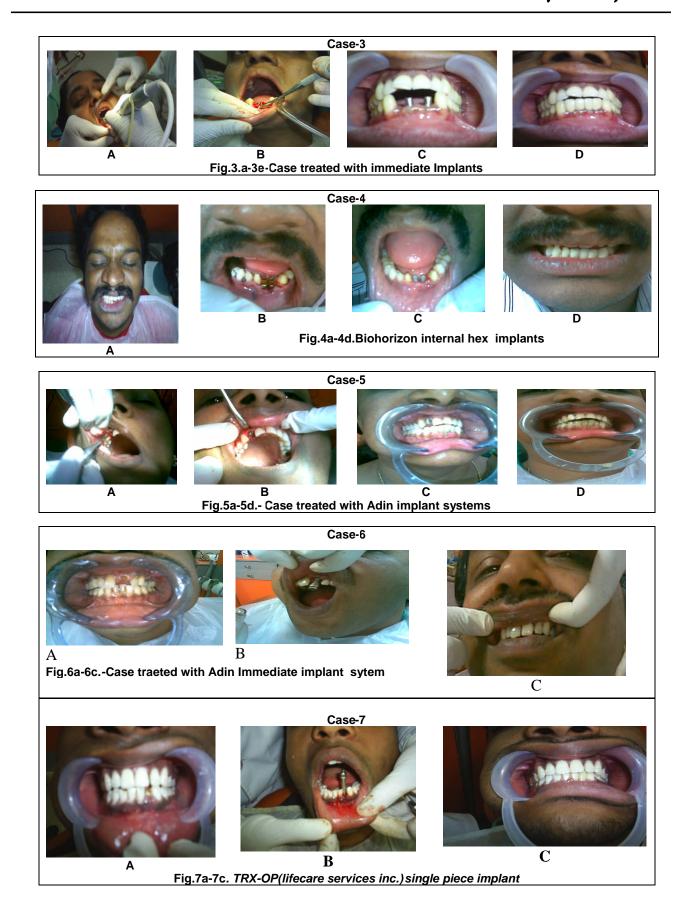
Case 2

A male patient of age 24 years had come with history of loss of teeth due to R.T.A four months back. He desired to change the smile. On x-ray he was shown to have broken root stump and missing 11, 21, and 22(**Fig.2A**). 3-Adin implant system internal implants ⁴ were used and after 3 months were given PFM individual crowns(**Fig.2F**).

¹Department of Prosthodontics, Daswani Dental College and Hospital, Kota, Rajasthan.

²Department of Orthodontics, Navodaya Dental College and Hospital, Raichur, Karnataka





Annals and Essences of Dentistry

Case 3

A 32 yrs female patient met with accident and had trauma and pain to lower front teeth. X-ray showed avulsion of 32 with horizontal root fracture at apical 1/3 rd i.r.t 31 41 and 42(**Fig.3A**). Atraumatic extraction was done with immediate implantation. The permanent restoration was done after 5 months from the surgery(**Fig.3D**).

Caso A

The fourth case was treated by local dentist after patient met with accident and lost 31 32 teeth(**Fig.4A**). Patient was not satisfied and had come for change of smile. He was treated by using 3.5X 10m.m. *Biohorizon internal hex implants* in 31 an 32 region³(**Fig.4B**).

Case 5

A female patient of aged 48 yrs came to the department with pain in the upper rt. front tooth region after she had a fall one week back. X-ray showed horizontal root fracture of 12 at middle 1/3rd of root(**Fig.5A**). Immediate implant of size 3.75 X 13.0 mm. of *Adin implant system* ³ was selected and placed. The permanent restoration was done after 5 months(**Fig.5D**).

Case 6

A male patient of age 49 yrs had come with failed and fracture of Right Upper front tooth. The tooth was identified as 21(**Fig.6A**). Immediate implant was done using 4.2 X 13.0 m.m. Adin dental implant ³. Permanent restoration was done after 5 months (**Fig.6D**).

Case 7

A 22 yrs male patient complained of broken lower front tooth with history of incomplete R.C.T(**Fig.7A**). Immediate implantation was done with immediate loading using 2.8 X 13 m.m. *TRX-OP*(*lifecare services inc.*)^{4,5} single piece implant(**Fig.7C**).

Case 8

A male patient of age 55 yrs came with the desire to replace his upper full arch(**Fig.17**) and lower front teeth. He had complete missing max. Teeth and lower 31 32 41 42. Ten dental implants of *Biohorizon inc. U.S.A.*⁴, were placed-8 in upper and 2 in lower(**Fig.8a,Fig.8B**). The permanent restoration was done by using PFM bridge after 6- months of placement(**Fig.8.D**). Indirect sinus lift was also required during placement⁶.

Case 9

A female patient desired replacement of her back missing teeth (Fig.9A). She had multiple missing teeth i.e.

14, 15, 16, 35, 36, 37. Four dental implants 2-in each arch of hitech implants were used to restore her smile back(**Fig.9F**).

Case 10:

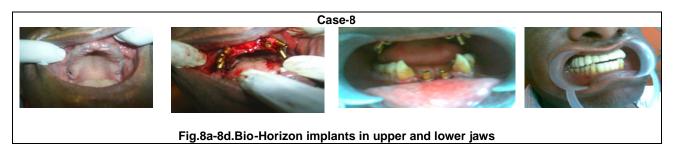
A female patient of age 62 yrs requested for smile make over(Fig.26). She had badly mutilated teeth with many broken splinting wires in her dentition. She was taken up for full mouth rehabilitation with 12 dental implants(Fig.10A) and was worked for hybrid prostheses(Fig.10C). The change of smile was evident in (Fig.10E)

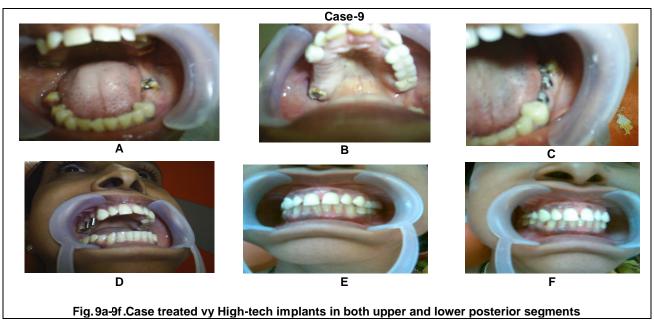
CONCLUSION:

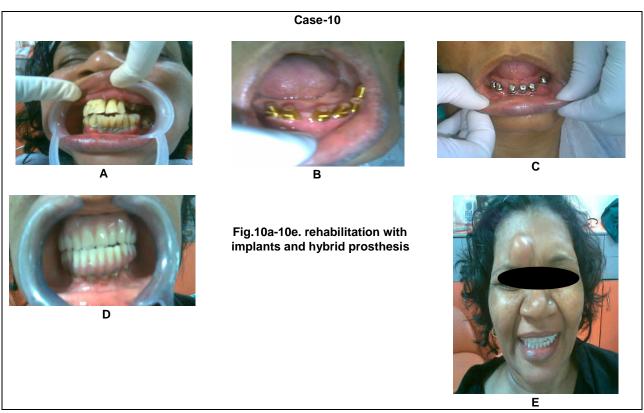
The change of smile from dull to lustrous is greatly desired by many in the society. Dental implants is one of the best tool to impart it $^{7-10}$.

References

- Andreasen J O, Hjørting-Hansen E.Replantation of Teeth. I. Radiographic and Clinical Study of 110 Human Teeth Replanted After Accidental Loss, Acta Odontologica Scandinavica; 1966; 24(3): 263-286
- Arnhart C, Kielbassa AM, Martinez-de Fuentes R, Goldstein M, Jackowski J, Lorenzoni M, Maiorana C, Mericske-Stern R, Pozzi A, Rompen E, Sanz M, Strub JR.Comparison of variable-thread tapered implant designs to a standard tapered implant design after immediate loading. A 3-year multicentre randomised controlled trial. Eur J Oral Implantol. 2012 Summer;5(2):123-36. PubMed PMID:22866289.
- Steven Boggan R. ,.Todd Strong J, MSCarl E. Misch, Martha Warren Bidez, Influence of hex geometry and prosthetic table width on static and fatigue strength of dental implants. J Pros Dent, 1999,82;4: 436-440.
- Salaria S. K., Rajni Aggarwal, Veenu Madaan Hans, Mayank Hans A rare case report of periimplant bone necrosis: Mapping the distance of initial peri-implant complication toward a path of success .Contemp Clin Dent. 2011 Oct-Dec; 2(4): 347–350.
 Barewal RM, Stanford C, Weesner TC. A randomized
- Barewal RM, Stanford C, Weesner TC. A randomized controlled clinical trial comparing the effects of three loading protocols on dental implant stability. Int J Oral Maxillofac Implants. 2012 Jul;27(4):945-56. PubMed PMID: 22848898.
- Ormianer Z, Piek D, Livne S, Lavi D, Zafrir G, Palti A, Harel N. Retrospective Clinical Evaluation of Tapered Implants: 10-year Follow-up of Delayed and Immediate Placement of Maxillary Implants. Implant Dent. 2012 Aug;21(4):350-356. PubMed PMID: http://dx.doi.org/10.1097/ID.0b013e31825feb16
- Cabello G, Rioboo M, Fábrega JG. Immediate placement and restoration of implants in the aesthetic zone with a trimodal approach: soft tissue alterations and its relation to gingival biotype. Clin Oral Implants Res. 2012 Jul 9. doi:10.1111/j.1600-







- 0501.2012.02516.x. [Epub ahead of print] PubMed PMID: 22775590.
- Rokn AR, Saffarpour A, Sadrimanesh R, Iranparvar K, Saffarpour A, MahmoudzadehM, Soolari A. Implant site development by orthodontic forced eruption of nontreatable teeth: a case report. Open Dent J. 2012;6:99-104. Epub 2012 Jun 8.PubMed PMID: 22715348; PubMed Central PMCID: PMC3377904. http://dx.doi.org/10.2174/1874210601206010099
- Patras M, Kourtis S, Sykaras N. Creating natural-looking removable prostheses:combining art and science to imitate nature. J Esthet Restor Dent. 2012Jun;24(3):160-8. doi: 10.1111/j.1708-8240.2011.00493.x. Epub 2011 Nov 15. PubMed PMID: 22691076. http://dx.doi.org/10.1111/j.1708-8240.2011.00493.x
- Büttel AE, Gratwohl DA, Sendi P, Marinello CP. Immediate loading of two unsplinted mandibular implants in edentulous patients with an implantretained overdenture: an observational study over two years. chweiz Monatsschr Zahnmed. 2012;122(5):392-7. Pub Med PMID: 22678703.

Corresponding Author

Dr.K.Satyendra Kumar

Reader

Department of Prosthodontics, Daswani Dental College and Hospital, Kota, Rajasthan. Phone No:09399971156

E-mail: satyakotagiri@yahoo.com.