REHABILITATION OF MISSING INCISOR WITH NON RIGID CONNECTOR

Anamika Shukla, ¹Seema Sathe, ²S.R.Godbole, ³Savali Thakare, ⁴Shweta Rokade ⁵

Resident, ¹ Professor, ² Professor and Head, ³Resident ⁶⁻⁵

1-5-Department of Prosthodontics, Sharad Pawar Dental College, Datta Meghe Institute of Medical Sciences, Wardha

Abstract

A loss of a single anterior tooth or a part of anterior tooth hampers the overall esthetic of the patient in many ways. Prosthetic management while maintaining diastema is required many a times which is not possible using rigid connectors. Non rigid connector (Loop connector) helps to suffice this problem. Using loop connector an anterior prosthetic rehabilitation can be done in cases where the space management cannot be done using conventional FPDs. **Key Words:** Missing incisor, Connector, Spacing, Esthetic.

Introduction

A missing anterior teeth has a negative impact on the individual's personality. A missing anterior tooth attracts the major concern of the patient because of affected esthetic appearance and requires an immediate need of replacement. The anterior are mainly responsible for esthetic, any variation in these makes an individual conscious of his/her appearance. Rehabilitation of anterior requires the attention to the various components of smile designing. These components if maintained, helps in developing an appealing smile which boosts the self-esteem of the patient.

Loss of anterior tooth can be congenital, developmental and traumatic. In case of missing teeth due to trauma a multidisciplinary approach is required for the rehabilitation.

The purpose of the article is to describe a technique for replacing a missing lateral incisor due to trauma.

Case Report: A patient reported to the department of Prosthodontics, Sharad Pawar Dental College, Wardha with the chief complaint of unesthetic appearance due to missing left maxillary lateral incisor due to trauma. Patient gives a history of trauma due to which there was an exfoliation with 22, and Ellis class3 fracture with 21. Patient also gives a history of Root Canal treatment with 21 one week back. (Figure 1)

The treatment plan was fixed dental prosthesis involving 21 and 23.

Procedure: On the first appointment diagnostic impressions were made with an irreversible hydrocolloid impression material. (Figure 2)

On the diagnostic cast mock preparation was done and diagnostic wax up was made. After diagnostic wax up it was observed that the space for missing lateral incisor was more than the contralateral lateral incisor. Hence the treatment planned was replacement of missing lateral incisor to be done with maintenance of diastema between 11, 21 and 21, 22 and 22, 23. For the use of a non rigid connector (loop connector) was planned.

After the space analysis and treatment planning, tooth preparation and gingival retraction was done. (Figure 3) Final impression was made using double mix double technique using polyvinyl siloxane impression material.

The provisionals were made using indirect technique and the final prosthesis were made as a metal ceramic restoration with loop connector. (Figure 4,5,6)



Figure 1: *Pretreatment photograph*



Figure 2: Diagnostic impression





Figure 3: Tooth Preparation



Figure 4: Final prosthesis frontal view



Figure 5: Final prosthesis intraoral view



Figure 6: Post treatment extraoral view

Discussion

Connectors are that part of FPD which links the pontic and the retainer. Correction of diastema in the anterior region is major esthetic problem to treat with conventional FPD. Maximum esthetic results may be obtained only if the natural anatomic forms of the teeth are protected and the diastema is maintained. Other available options are implants and removable partial denture but loop connector fixed partial denture is used in cases of excessive mesiodistal width of pontic space when fixed partial dentures are planned. The incorporation of a loop connector in this design allowed the patient to be given an excellent esthetic outcome without compromising the functionality of the restoration. Thus, loop connectors have several advantages when it comes to the esthetic appearance. 3-5

Conclusion

Correction of spacing with an anterior region is difficult. Many a times need for maintaining the spaces are required for better results. Loop connector is one such option wherein the prosthetic rehabilitation of teeth are done while maintaining diastema between the anteriors. It is viable treatment option when space management cannot be done with conventional FPDs.

References

- 1. Bello A, Jarvis RH. A review of esthetic alternatives for the restoration of anterior teeth. J Prosthet Dent 1997; 78:437-40.
- Oh W, Götzen N, Anusavice KJ. Influence of connector design on fracture probability of ceramic fixed-partial dentures. J Dent Res 2002;81:623-7.

- 3. Dange SP, Khalikar AN, K. Shiv. Non- Rigid connectors in fixed dental prosthesis A Case Report. JIDA 2008; 2: 356-8.
- 4. Kamalakanth S, Arbaz S. Anterior loop connector fixed partial denture: A simple solution to a complex prosthodontic dilemma. Journal of Indian Prosthodontic Society 2008;8:162-4.
- 5. Taggart J. Resin bonded spring cantilever bridge. Restorative dentistry1990;6(2):4-5.

Corresponding Author:

Anamika Shukla
202, Department of Prosthodontics
Sharad Pawar Dental College
Sawangi (Meghe), Wardha
Maharashtra, India
442001
email- anamikarshukla@gmail.com