

International Journal of Research in Health and Allied Sciences

Journal home page: www.ijrhas.com

Official Publication of "Society for Scientific Research and Studies" [Regd.]

ISSN: 2455-7803

CASE REPORT

Cusil like Denture –A Case Report

Renu Gupta¹, R.P Luthra², Ashwani Kumar³

¹Professor and Head, Dept of Prosthodontics HP Govt Dental College, Shimla, H.P,

²Professor and Head, Dept of Dentistry , Dr Y.S Parmar Govt Medical College, Nahan , H.P,

³PG 2ndYr, Dept of Prosthodontics, HP Govt Dental College, Shimla, H.P

ABSTRACT:

Overdentures or transitional dentures or immediate dentures following complete extractions are the treatment remaining natural teeth⁵. But for patients who are apprehensive for complete extractions, Cu-Sil dentures are the simplest mode of partially edentulous treatment available in the transitional phase. In the present case report, we presented case of a 56-year-old male patient was self-referred to the Department of Prosthodontics with a chief complaint of poor esthetic, speech difficulty, and wanted replacement of missing teeth. Thus, a complete denture for the mandibular arch and a Cu-sil like denture for the maxillary arch was planned.

Key words: Cusil like denture, Edentulous

Received: 12 May, 2019

Revised: 18 June, 2019

Accepted: 21 May, 2019

Corresponding author: Dr. Ashwani Kumar, PG 2ndYr, Dept of Prosthodontics, HP Govt Dental College, Shimla, H.P

This article may be cited as: Gupta R, Luthra R.P, Kumar A. Cusil like Denture –A Case Report. Int J Res Health Allied Sci 2019; 5(3): 100- 103.

INTRODUCTION

M M DeVan has rightly said that "Perpetual preservation of what is remaining is more important than the meticulous reconstruction of what is lost¹." Complete edentulism, when rehabilitated with removable prosthesis follows sequelae of psychological trauma, lack of stability and retention, compromised aesthetics, residual ridge resorption and masticatory dysfunction. Crum and Rooney² and Van Wass et al³ says that there is relatively lower alveolar bone resorption in partially edentulous ridges than in cases of complete edentulism. Other advantages of preserving natural teeth include maintenance of proprioceptive ability of the periodontium and increased stability of the removable prosthesis. Overdentures or transitional dentures or immediate dentures following complete extractions are the treatment remaining natural teeth⁵. But for patients who are apprehensive for complete extractions, Cu-Sil dentures are the simplest mode of partially edentulous treatment available in the transitional phase. A Cu-Sil denture is essentially a complete denture featuring a soft elastomeric gasket which clasps

the neck of all the remaining natural tooth/teeth, thereby allowing to seal out food and fluids, and facilitates cushioning and splinting of all the natural tooth/teeth from the hard acrylic denture base. On the other hand, preservation of teeth to support an abutment retained fixed removable prosthesis is another stable alternative to complete dentures. So, the removable prosthodontics denture can allow us to achieve a correct balance between retention, stability, aesthetics and masticatory function, thus increasing patient compliance⁴. This clinical report discusses the rehabilitation of a patient with a Cu-Sil like denture for the maxillary partially edentulous arch and complete denture for the mandibular arch.

CASE REPORT

A 56-year-old male patient was self-referred to the Department of Prosthodontics, H.P Government Dental College, Shimla with a chief complaint of poor esthetic, speech difficulty, and wanted replacement of missing teeth (Figure 1a). Dental history revealed that the missing teeth were extracted due to caries. Patient presented with maxillary partially edentulous arch with

teeth present with 17 and 27, and mandibular complete edentulous arch . Oral hygiene was fair. Patient was not willing for any extraction or endodontic treatment. A definitive treatment plan could be worked out for this patient. Thus, a complete denture for the mandibular arch and a Cu-sil like denture for the maxillary arch was planned.

PROCEDURE

1. Upper impression is made with irreversible hydrocolloid impression(Alginate-dentsply)

- and lower impression with impression compound(kerr-company).(fig1b)
2. The special tray is constructed on using autopolymerising resin. Border molding is done with DPI green stick compound then impression is made with medium body in closed tray in maxillary arch and with zinc-oxide eugenol in mandibular arch.(fig 2a)



Preoperative intra oral views of upper and lower arches (fig1a)



Preliminary diagnostic impression (fig1b)



Preliminary Casts (fig1c)



Secondary impression of maxillary and mandibular arches (fig 2a)

3) Secondary casts are made. Jaw relation, try-in and denture processing is done in conventional manner.(fig 3)



Try- in (fig 3)

4)Denture is finished and polished. In the 17 and 27 region space is created of 4-5mm around the tooth in which acrylic based soft liners (GC TEMPORARY SOFT LINER) is placed. Denture was inserted in patient's mouth and held in position. After setting of the material denture was removed, trimmed the excess.



Finished denture (fig 4)



Postinsertion of final dentures (fig 5)

5) Post insertion instructions were same as for any removable prosthesis. As there are chances of fungal growth on the soft liner material, special care has to be taken regarding maintenance of excellent oral and denture hygiene. Use of denture cleansers with antimicrobial agents can be recommended.

DISCUSSION

The patients having very few remaining teeth can be treated by fabrication of over dentures or immediate dentures or transitional dentures.^{6,7} Fabrication of Cu-Sil like dentures does not involve invasive procedures, tooth preparations, and extra patient visits. Many patients delay getting all their teeth extracted as it has a detrimental effect on their psychology. Thus, Cu-sil dentures serve as an amicable treatment option for such patients. Cu-sil like dentures are aimed at preserving the remaining natural teeth and have a positive effect on retention and stability of dentures. It gives the patient psychological satisfaction of retaining the natural teeth. No special impression techniques or materials are required. Future add-ons and relines are possible. The Cusil like denture can serve as conventional full denture if the patient later loses all the natural teeth. Cusil dentures serve as a solution for lone standing or very few remaining teeth present in the dental arch. Cusil dentures are contraindicated for patients with numerous, evenly distributed natural teeth across the dental arch, this will result in a weak appliance. They should be avoided in patients with bruxism, severe undercut areas and patient with high smile line⁹. The gingiva of remaining teeth is covered totally, which may lead to plaque accumulation, which can be avoided by regular check-ups and proper hygiene maintenance.

CONCLUSION

Cu-Sil like dentures provides a snug fit over existing healthy tooth structures. An elastic sgasket seals itself around the cervical part of each tooth, thereby providing a stable and healthy fit. Considering the advantages and disadvantages of the technique, Cu-Sil like dentures have evolved to be a suitable treatment option for edentulous patients with very few remaining teeth. It promotes healthy stimulation to maintain alveolar bone. Retention is improved and vertical dimension and proprioception are maintained.

REFERENCES

1. DeVan M. M. Transition from natural to artificial teeth. *J Prosthet Dent* 1961;11:677-88.
2. Crum RJ, Rooney GE. Alveolar bone loss in overdentures: a 5-year study. *The Journal of prosthetic dentistry*. 1978 Dec 1;40(6):610-3.
3. Van Waas MA, Jonkman RE, Kalk W, Van't Hof MA, Plooi J, Van Os JH. Differences two years after tooth extraction in mandibular bone reduction in patients treated with immediate overdentures or with immediate complete dentures. *Journal of dental research*. 1993 June 1;72(6):1001-4.
4. Khandelwal M, Punia V. Saving one is better than none: Technique for cu-sil like denture – A case report. 2011;03(01):41-5.
5. George A. Zarb, Charles L. Bolender, Judson C. Hickey, Gunnar E. Carlsson. *Boucher's Prosthodontic treatment for edentulous patients*, 10th ed. Mosby.71-99.
6. Zarb-Bolender: *Prosthodontic treatment for edentulous patients*, 12th ed. Mosby.6-23,160 176,190-208.
7. Sheldon Winkler: *Essentials of complete denture prosthodontics*, 2nded. Ishiyaku EuroAmericaInc.U.S.A. 22-34,384-402
8. Ivy S. Schwartz and Robert M. Morrow: *Overdentures-Principles and Procedures*. *The Dental Clinics of North America* 1996: 40-1:169-94.
9. Gagandeep K, Sangeetha G, Deepika S. Cusil denture: A novel conservative approach- A case report. *Unique J Med Dent Sci* 2013;01(02):56-8.