



SMILE REHABILITATION USING CHEEK PLUMPERS (A CASE REPORT)

Prosthodontics

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ABSTRACT

Prosthetic rehabilitation of completely edentulous patient is no longer confined to replacement of missing teeth but also supporting structures. There are many esthetic consequences of edentulism, among which facial disfigurement due to sunken appearance of cheeks and lips has a greater negative psychological impact on the individual. Slumped or hollow cheeks can add years to a person's age. This article has described a simple, effective and noninvasive treatment alternative to improve facial appearance in a completely edentulous patient with hollow cheeks by making use of detachable plumper prosthesis using magnet retained cheek plumpers.

KEYWORDS

INTRODUCTION

Prosthetic rehabilitation of completely edentulous patient is no longer confined to replacement of missing teeth but also supporting structures. There are many esthetic consequences of edentulism, among which facial disfigurement due to sunken appearance of cheeks and lips has a greater negative psychological impact on the individual. Slumped or hollow cheeks can add years to a person's age.

This is achieved with the help of cheek plumper, also known as cheek lifting appliance which is basically a prosthesis to support and plump the cheek providing a youthful appearance

A conventional cheek plumper prosthesis is a single unit prosthesis with extension near premolar–molar region which support the cheek. Major flaw of this design is increased weight of the prosthesis and hinderence due to increased mesiodistal width ,at the time of placement especially in microstomia cases. Detachable plumper prosthesis is thus more beneficial. In a detachable plumper prosthesis, plumper part can be detached from the complete denture.

CASE REPORT

A patient aged 68 years, reported to the Department of Prosthodontics and Crown & Bridge with the chief complaint of replacement of ill-fitting denture and very poor esthetics. It was noticed that the patient was unhappy with the denture esthetic problems of sunken and sagging of cheeks.

On oral examination, one of the major finding was poor esthetics, unsupported oral musculature, sunken and slumped cheeks. Intra oral examination showed high well rounded maxillary and mandibular arch with sufficient inter arch space. Patient had sufficient mouth opening. New complete denture was planned for the patient with cheek plumpers to provide the adequate support on both side of the cheeks to lift the sunken cheeks and to enhance facial esthetics and appearance.

Magnet retained cheek plumpers was planned due to its small compact size and strong attractive forces.

Maxillary and mandibular impressions were made using impression compound . Custom trays were made using autopolymerising acrylic resin. Border molding was done using low fusing impression compound and wash impressions were made with zinc oxide eugenol. Jaw relations were recorded using face bow. For the try in appointment waxed denture were first tried for occlusion and esthetics.Magnet was placed in maxillary denture in molar region and was evaluated for the correct position of plumpers. After that cheek plumpers made in autopolymerising acrylic resin was attached to the maxillary denture ,which was made using putty indexing and were evaluated to give patient a more fuller appearance. The waxed plumper was separated from the waxed denture.

Both the waxed denture and plumpers were flaked by conventional method. Plumpers were packed with metallic ring .Bench curing was done for 2-3 hrs.Curing was done using short curing cycle (75° for 2 hrs then boiling at 100° for 1 more hr).Deflasking and trimming of denture was done.

Denture insertion along with plumpers was done after all possible evaluations. All that post operative instruction was given to the patient and was informed about the limitations of magnet attached in denture so, he was instructed to report to the clinic once every 6 months to replace the magnets if required.

Some important facts to be considered at the time of cheek plumper fabrication

- Magnetic property of the magnet should be checked regularly
- Plumpers should not hinder with the retention of denture
- Plumpers should not hurt the oral mucosa
- Plumpers should not compromise phonation of the patient.
- Plumpers should not compromise oral hygiene

SUMMARY

This is a simple and non-invasive treatment modality to enhance the facial esthetics of a patient with sunken cheeks. In this case magnets was tried to improve the patient's facial appearance.

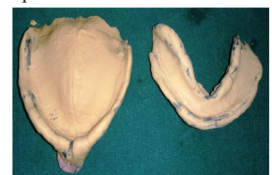
The magnet retained cheek plumper prosthesis successfully restored the contour of the cheek, improved the esthetics and psychological well being of the patient. Magnetic retention for hollow cheek patients is advantageous due to its small compact size and strong attractive forces; however, over a period of time the magnets used intraorally require replacement due to lack of long-term durability in oral conditions. So the patient was informed about the limitations, and he was instructed to report to the clinic once every 6 months to replace the magnets if required

CONCLUSION

Loss of teeth, a part of normal ageing can be restored along with few modifications to enhance the lifestyle and dental care of the elderly. With increasing age, treatment modalities become increasingly challenging. In addition to positioning of teeth for lip support, excellent denture esthetics can be achieved by providing additional support like cheek plumper to the slumped tissues.



MAXILLARY AND MANDIBULAR
PRIMARY IMPRESSION



MAXILLARY AND MANDIBULAR
FINAL IMPRESSION



JAW RELATION USING FACE BOW



TEETH SETTING WITH PUTTY INDEX FOR PLUMPERS



TRY IN ALONG WITH MAGNET PLACEMENT



PLUMPERS TRY IN



WAX-UP OF DENTURE AND PLUMPERS



FLASKING OF CHEEK PLUMPERS WITH METALLIC RING



CHEEK PLUMPERS



INTRAORAL ORAL VIEW OF CHEEK PLUMPERS

LATERAL VIEW OF THE PATIENT



PATIENT WITHOUT DENTURE



PATIENT WITH DENTURE



PATIENT WITH CHEEK PLUMPER

FRONTAL VIEW



PATIENT WITHOUT DENTURE



PATIENT WITH DENTURE



PATIENT WITH CHEEK PLUMPER

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