IMPROVING FACIAL ESTHETICS-COMPLETE DENTURES WITH DETACHABLE CHEEK PLUMPERS

Qanungo Anchal 1, Aras Meena Ajay 2, Chitre Vidya 3
1. Post-graduate student, Dept. of Prosthodontics, Goa Dental College and Hospital
2. Professor and Head, Dept. of Prosthodontics, Goa Dental College and Hospital
3. Professor, Dept. of Prosthodontics, Goa Dental College and Hospital

ABSTRACT:
Function and esthetics are inseparable and interdependent factors determining prosthodontic success. Prosthetic rehabilitation of a completely edentulous patient no longer connotes only replacement of missing teeth. Slumped or hollow cheeks can add years to a person’s age. This article describes a simple, effective and non invasive treatment alternative to improve facial appearance in a completely edentulous patient with sunken cheeks by incorporating detachable plumpers in the complete denture prosthesis using press buttons as attachments.

KEYWORDS: cheek plumper, sunken cheeks, denture esthetics

INTRODUCTION
Cheeks due to their extreme visibility are an important factor in determining facial esthetics. Form of cheeks is determined by the support provided by internal structures—teeth, ridges or dentures. Extraction of molars, sagging of tissues due to aging, or weight loss can cause concavities below the malar bone or sunken cheeks. [1] Slumped or hollow cheeks can add years to a person’s age and hence have a detrimental psychological effect on the patient.

While replacing missing teeth, it is important that the prosthesis restores the function as well as esthetics. Proper extensions and contours of denture flange can help achieve this. However in patients with hollow cheeks, extra support needs to be provided. This can be done by using cheek plumper or cheek lifting appliances.

Use of plumper prosthesis in maxillofacial prosthodontics is well documented. [2–4] A cheek plumper prosthesis could be a single unit prosthesis with extensions near premolar–molar region to support the cheek. Major drawback with this design is increased weight of the prosthesis. Also increased width may hinder placement especially in microstomia cases. The other option would be to fabricate a detachable plumper prosthesis in which the plumper part can be detached from the complete denture making it more convenient, comfortable and beneficial.

This clinical report illustrates the use of pre-fabricated stainless steel press buttons as attachments to support a detachable cheek plumer prosthesis in a completely edentulous patient with hollow cheeks.

*Corresponding Author Address: Dr Anchal Qanungo. Email: anchal.qanungo@gmail.com
CASE DETAIL

A 58 year old male patient reported to the prosthodontic department seeking replacement of missing teeth. Intraoral examination revealed completely edentulous upper and lower arches. Patient was edentulous for past 2 years and reason for tooth loss was periodontal. One of the major findings on extra oral examination was hollow cheeks. Patient was conscious of them and desired a prosthesis which would make his face look fuller and healthier. Hence it was decided to give patient upper and lower bilaterally balanced complete dentures with detachable cheek plumpers for the maxillary denture.

Maxillary and mandibular impressions were made using impression compound (Y Dents, MDM Corporation, Delhi) followed by fabrication of custom using autopolymerising acrylic resin. Border molding was performed using low fusing impression compound (Aslate, Asian Acrylates, Mumbai) and wash impressions were made with light viscosity addition silicone impression material (Aquasil, Dentsply/ caulk). Intermaxillary relations were recorded and teeth were set in balanced articulation.

For the try in appointment waxed dentures were first evaluated for occlusion and esthetics. After that cheek plumpers made in wax were attached to the maxillary trial denture with the help of press buttons (Figure1). The cheek plumpers were attached at the cervical aspect between the second premolar and first molar regions of the maxillary denture flange and evaluated for adequate cheek support, function and esthetics.

The press buttons were removed from the maxillary denture base and the cheek plumpers just before processing the denture and the plumpers. The upper/lower dentures and the cheek plumpers were acrylized in conventional manner [Figure 3d]. After finishing and polishing, the press buttons were placed in their original positions on the denture base as well as plumpers, and sealed using autopolymerizing resin. The female part of the press button was incorporated in the denture base whereas the male part was incorporated in the plumpers in order to avoid any discomfort due to projection of the press button in case the patient wished to remove the plumpers (Figure 2).

Patient was instructed on the use of plumpers and dentures were delivered after evaluating them for fit and Esthetics (Figure 3a & b). Recall appointment were scheduled after 1 day, 1 month and every 6 months.

DISCUSSION

In the present case detachable plumper prosthesis were planned to reduce the weight of the final prosthesis and to allow ease in placement of the prosthesis. Detachable plumpers enabled the patient to remove the plumpers and use the denture if required. In the past, magnet retained plumper prosthesis have been used but they exhibit loss of magnetic property over a period of time. To form a
detachable unit, press buttons were used as they provide an easy, cost effective and reliable means.

CONCLUSION

Pemphigus vulgaris may clinically manifest with striking resemblance to MMP such as presentation of intact vesicles and desquamative gingivitis. A definitive diagnosis in such cases mandates histopathological and immunological examinations. In patients with PV who have lesions confined to the oral cavity, proper management and close follow up is essential to control the disease and prevent progression.

REFERENCES

FIGURES:

**Figure 1**: Trial of waxed cheek

**Figure 2**: Press buttons incorporated in acrylized dentures

**Figure 3a**: Pre-treatment

**Figure 3b**: Post-treatment