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# Prosthetic Rehabilitation of Sunken cheeks using a Cheek Plumper: A Case Report

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**ABSTRACT**:
Loss of teeth can reduce the natural support of the cheeks and surrounding facial tissues, resulting in reduced cheek fullness and a hollow or sunken facial appearance. This condition may be more evident in patients with reduced tonicity of the facial musculature. Conventional complete dentures may not always provide adequate support to the cheek tissues; therefore, a cheek contouring prosthesis can be used to provide additional support and restore facial fullness.

This clinical report describes the prosthetic rehabilitation of a patient with sunken cheeks using a customized cheek plumper retained with a detachable button attachment. The cheek contour was clinically developed according to the facial musculature and the desired degree of support, and the removable prosthesis was fabricated using heat-cured acrylic resin. The button attachment provided adequate retention while allowing easy removal of the cheek prosthesis for cleaning and maintenance. The customized prosthesis improved cheek support, facial symmetry, and overall facial aesthetics

. This technique provides a simple, economical, minimally invasive, and practical approach for improving facial contour in patients with deficient cheek support.

**KEYWORDS:** Sunkencheek, Cheek plumper, Removable prosthesis, Facial aesthetics.

## I. INTRODUCTION

Facial harmony is an important component of overall appearance and can have a considerable influence on a person's confidence and social well-being. Deficiency of the soft tissues of the cheek may produce a sunken cheek appearance, which can be particularly evident in patients with reduced intraoral and facial support.

A cheek plumper is an intraoral prosthetic extension designed to provide support to the cheek tissues and improve the external facial contour. The design and method of retention of a cheek plumper should provide adequate soft-tissue support while maintaining patient comfort, speech, mastication, hygiene, and ease of insertion and removal. Different approaches have been described for achieving cheek support, depending on the clinical situation and available prosthetic space.

The present case report describes the rehabilitation of a patient with a depressed cheek using a customized cheek contouring prosthesis incorporating a button as a simple means of retaining and positioning the cheek-supporting component. The technique provides an uncomplicated approach for improving facial contour while maintaining the functional requirements of the removable prosthesis.

## II. CASE REPORT

A 65 year-old male patient reported to the Department of Prosthodontics for the replacement of missing teeth in upper and lower arch and finds difficulty in chewing. No relevant medical history. Clinical examination revealed completely edentulous maxillary and maxillary arch and extra oralfindings revealed sunken cheeks. Diagnosisobtained was completely edentulous maxillary and mandibular arch. Treatment plan suggested wereconventional complete denture with detachable cheek plumper for maxillary denture.

Primary impression were made using impression compound and primary modelwere obtained. Border moulding by green stick compound and final impression were made using zinc oxide eugenol impression paste. Jaw relation wererecorded(Figure 1).Wax try in of complete denture were made.Simultaneously,modelling wax roll were made and adapted over buccal flanges of both sides in the premolar and molar region. Wax was checked for adequate cheek support and was modified to get the desired outcomeattached with the use of press snap button(Figure 2).

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Figure1: Jaw relation

Figure 2: Wax try in with cheek plumper

Flasking and dewaxing were done(Figure 3). Dentures and cheek plumper were fabricated using heat cure acrylic resin. Dentures with cheek plumper were inserted(Figure 4).

Figure 3:After dewaxing

Figure 4: Complete denturewith cheek plumper

Post insertion instructions for wearing the complete denturewere explained to the patient(Figure 5,6) including oral hygiene and maintenance.

Figure 5:Before

Figure 6:After

The patient was instructed on the correct method of attaching and detaching the press snap button cheek plumper. The attachment components were advised to be kept clean and dry after each use. The patient was scheduled for regular follow-up visits to evaluate comfort, retention and the condition of the attachment mechanism.

## III. DISCUSSION

Loss of teeth and reduction in dentoalveolar support can decrease the support of cheek tissues and, along with reduced facial-muscle tonicity, may result in hollow or sunken cheeks and an unaesthetic facial appearance. A cheek plumper can provide additional support to the cheek tissues and improve facial fullness and facial aesthetics [1]. Customized cheek plumpers with friction-lock attachments have been used to restore cheek contour while providing adequate retention [2]. Magnet-retained cheek plumpers offer convenient retention and removal for maintenance [3].

Stainless-steel double die-pin attachments have also been described as an alternative mechanical retention system for detachable cheek plumpers [4]. Hollow cheek plumpers can help restore facial fullness while reducing the weight of the prosthesis [5]. Die-pin attachments provide another detachable approach for improving facial aesthetics in completely edentulous patients [6]. Different attachment systems have also been used with detachable cheek plumpers to provide appropriate support according to the patient's facial requirements [7].

The detachable design facilitates removal and cleaning of the cheek prosthesis and can improve patient convenience [8]. In patients with xerostomia, a cheek plumper combined with a

salivary reservoir may provide both aesthetic and functional benefits [9]. Customized attachments have also been reported as a practical method for retaining detachable cheek plumpers while allowing easy removal and maintenance [10].

## IV. CONCLUSION

Effective prosthetic correction can be done for sunken cheeks with cheek plumper using press snap button. It helps to restore facial contour and soft tissue support. This case report is a simple, conservative and cost effective treatment for patients with sunken cheeks.Theprosthesis can be easily removed and maintained by the patient.

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