



MANAGEMENT OF COMPLETELY EDENTULOUS PATIENT WITH FLABBY TISSUES IN THE ANTERIOR MAXILLA

Dental Science

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ABSTRACT

Management of flabby has been a challenge to the prosthodontist and clinicians for ages. Often it is seen that patients who have been wearing complete maxillary denture for years opposed only by mandibular anterior teeth resulted in the loss of all or part of the residual alveolar bone in the maxillary anterior region. The remaining soft tissues are easily distorted by conventional impression procedures rendering a poor prognosis for the complete denture prosthesis. Hence efforts have been made to record the flabby tissues mucostatically to improve denture retention, stability and support using modifications of the conventional Zafrulla Khan technique for recording flabby tissues.

KEYWORDS

INTRODUCTION

The management of flabby has been a challenge to the prosthodontist and clinicians for ages. Often it is seen that patients who have been wearing complete maxillary denture for years opposed only by mandibular anterior teeth resulted in the loss of all or part of the residual alveolar bone in the maxillary anterior region. The remaining soft tissues are easily distorted by conventional impression procedures, resulting in an unstable denture base with poor prognosis. Surgical resection of the flabby tissues often results in the loss of the anterior mucobuccal fold area. This may in turn create retention problems and make it difficult to relieve the denture base in the area of the labial frenum. So, efforts have been made to improve the quality and prognosis of such prostheses using modifications of the Zafrulla Khan technique¹. It is a quicker technique that causes minimum distortion of the flabby tissue.

CASE REPORT

A 65 year old male patient reported with difficulty in chewing food. He was diagnosed with a completely edentulous Class II maxillary² arch with flabby tissue in the maxillary anterior region (Fig 1). The frenal attachments³ were high for the maxilla as well as the mandible. Preliminary impression was made using impression compound (DPI Pinnacle, The Bombay Burmah Trading Corporation, Mumbai, India) in the conventional open mouth technique.

The diagnostic cast was poured and a custom tray was fabricated for final impression using autopolymerising resin (Rapid Repair, Gurgaon, India). 1 mm spacer wax used in the custom tray for the procedure. A handle was made in the centre the palate of the custom tray to aid in holding the tray and manipulation. The flabby tissue area was marked using an indelible pencil. A conventional border moulding was done using green stick ((DPI Pinnacle Tracing Sticks, The Bombay Burmah Trading Corporation, Mumbai, India) and an window was cut in the area of the flabby tissue in the custom tray (Fig 2 and 3). Final impression was done using zinc oxide eugenol paste. Excess material was removed from the window that was cut in the flabby tissue area. After completion of border moulding and final impression, the custom tray is placed in mouth. The mucosa over the maxillary anterior region was dried.

Light body addition silicon was injected through the window cut in custom tray (Fig 4). Since light body can't support itself, it was reinforced with dental plaster and held in place till the plaster was set (Fig 5). The impression was retrieved from the oral cavity and evaluated (Fig 6). The mandibular impression was made using

conventional open mouth technique. Master casts were made using dental stone. Denture bases were fabricated followed by the occlusal rim fabrication. Jaw relation record was taken in a conventional method. Facebow was transferred. The denture was fabricated using conventional laboratory procedures.

DISCUSSION

Every patient has unique treatment requirements. Proper diagnosis and treatment plan are the most important aspect of any rehabilitation plan. The Zafrulla Khan technique is one of the methods of handling a case of flabby ridge case. The advantages of this technique include, a. quick, b. records the flabby tissue with minimum displacement or distortion, c. saves chair time, d. doesn't require the fabrication of two custom trays, e. enables visualisation of the impression making of the unsupported movable tissues.

The main reason of flabby tissue in the maxillary anterior region is the replacement of the resorbed bone by hyperplastic tissue. Frequently seen in cases with combination syndrome as described by Kelly⁴ who believed that the key to many symptoms of the combination syndrome is the early loss of bone from the maxillary anterior region. The other consistent features of the syndrome are the enlargement of maxillary tuberosities and mandibular posterior bone resorption. It usually is seen in patients where a maxillary complete denture is opposed by natural mandibular anterior teeth.

CONCLUSION

The modified Zafrulla Khan impression technique was used in this case to achieve effective retention, stability and support. The technique recorded the flabby tissues in a mucostatic condition and provided adequate retention and resistance in the final prosthesis.



Fig 1. Completely edentulous maxillary ridge with flabby tissue in the anterior region

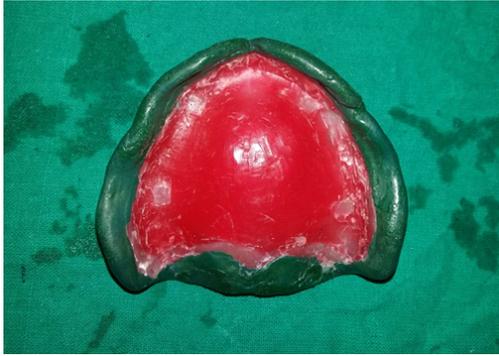


Fig 2. Border moulding using conventional technique

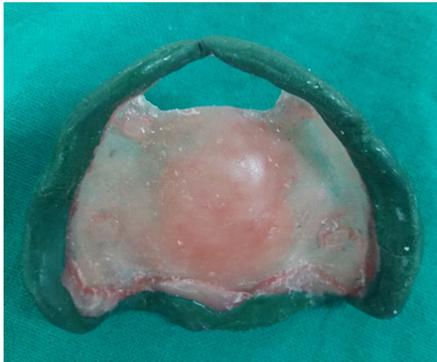


Fig 3. A window is cut in the anterior region of the custom tray lining the flabby tissue



Fig 5. Light body reinforced with dental plaster



Fig 6. Final impression using Zinc-oxide eugenol and light body

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