Journal of Research in Medical and Dental Science
2021, Volume 9, Issue 9, Page No: 367-369

Available Online at: www.jrmds.in
eISSN No.2347-2367: pISSN No.2347-2545

Prosthetic Rehabilitation of the Patient with Flabby Ridge- A Case Report

Prajakta Thool[1*], Surbhi Dudhe[2]

[1]*Department of Prosthodontics, Swargiya Dadasaheb Kalmegh Smruti Dental College and Hospital, Nagpur, India*

[2]*KDepartment of Prosthodontics, Bhabha University of Dental Sciences, Bhopal, India*

ABSTRACT

A superficial area of flexible and movable soft tissue affecting the maxillary or mandibular alveolar ridges is a fibrous or fibrous ridge. Rehabilitation of an edentulous patient with fibrous ridge can possess a difficulty in the fabrication of the complete denture. Impressions of this flabby ridge with special impression technique will help us achieve an adequate support, retention and stability of complete dentures. This paper aims to presents a case reports for prosthodontics rehabilitation of patient with flabby ridges with a proper impression techniques.

Key words: Flabby ridge, Fibrous ridge, Hyperplastic soft tissue, Displaceable tissue, Impression techniques

HOW TO CITE THIS ARTICLE: Prajakta Thool, Surbhi Dudhe Prosthetic Rehabilitation of the Patient with Flabby Ridge- A Case Report, J Res Med Dent Sci, 2021, 9(9): 367-369

Corresponding author: Prajakta Thool
e-mail ✉ :prajakta.thool@sdk-dentalcollege.edu.in
Received: 08/09/2021
Accepted: 22/09/2021

INTRODUCTION

A fibrous maxillary or mandibular ridge is a ridge having a superficial area of mobile soft tissue. Here the underlying alveolar bone is replaced by the hyperplastic soft tissue. Flabby ridges are typically composed of mucosal hyperplasia and loosely arranged fibrous connective as well as denser collagenase connective tissues. It usually affects the maxillary anterior region and commonly occurs when the natural teeth are against the edentulous area. Flabby ridge can also be a result of an unplanned dental extraction. The reported prevalence is up to 24% of edentulous maxillae and 5% edentulous mandibles. Forces exerted during mastication can cause displacement of this soft tissue affecting the denture seal area and in turn leading to the loosening of denture [1]. Complete dentures constructed over this displaceable tissue will affect its performance in function.

Management of a flabby ridge is mainly by three approaches surgical removal of fibrous tissue prior to conventional prosthodontics, which can be traumatic to the patient. Implant retained prosthesiswhich can be either fixed or removable, which is not feasible economically and is also traumatic conventional prosthodontics without surgical intervention.

The prosthodontic management of flabby ridges conventionally involves recording the flabby tissues in a minimally displaced form, whereas the rest of the tissues in functional form.

CASE REPRESENTATION

A 59-year-old male patient reported to the Department of Prosthodontics and Crown and Bridge, Swargiya Dadasaheb Kalmegh Smruti Dental College and Hospital Dental College and Hospital, Hingna, Nagpur, Maharashtra, India, with a complaint of looseness of the present dentures. The patient was wearing denture for the past 10 years. The patient had difficulty of masticating food and speaking with the old denture. No relevant medical history was reported. On Intraoral examination, edentulous maxillary and mandibular ridges were found. The maxillary anterior canine to canine region had the presence of flabby tissue which showed blanching of the tissues when pressure was applied with the mouth mirror end. The mandibular ridge was also completely edentulous and resorbed.

A treatment plan of fabricating a conventional complete denture with the modification in the impression technique to achieve minimum displacement of the tissue, during function and maximum retention and stability was finalised. It was planned to make the window involving the flabby ridge in the maxilla and then take an impression. Primary impressions were made with irreversible hydrocolloid to record the tissues in a minimally displaced form [2]. A spacer of modeling wax with 2 -mm thickness was adapted over the flabby ridge was adapted. Again a wax spacer with thickness of 1 mm over which Custom trays were fabricated in autopolymerizing resin (double spacer). Border molding was carried out using the

sectional method for the maxillary arch with low fusing impression compound (DPI Pinnacle, Tracing Sticks Dental Products of India, Ltd.). zinc oxide eugenol paste was used to make the impression. Intraorally the movable tissue was marked with indelible pencil, and the marking was transferred on to the final impression. A window was cut in the impression through the impression tray exactly corresponding to the area of the flabby tissues in the anterior maxilla The impression was placed in the mouth, and light body polyvinyl siloxane (Aquasil, Dentsply) was syringed on to the flabby tissues exposed through the window, and the maxillary impression was completed Now, this impression is beaded, boxed and poured properly. Impression was made normally for the mandibular arch [3]. Maxillary and mandibular jaw relation was recorded; teeth arrangement done and dentures were fabricated in conventional manner (Figures 1-3).

Figure 1: Primary impression of the maxillary arch made with irreversible hydrocolloid impression material and mandibular arch impression made with the impression compound.

Figure 2: Primary cast of the maxillary and mandibular arch, along with the adaptation of the double spacer over the flabby region.

Figure 3: Border moulding followed by window preparation in the flabby area and making final impression with zinc oxide eugenol for the remaining area and flowing light body over the flabby area.

Combination syndrome was first described by Kelly in 1972. It mostly occurs when the natural teeth opposes the corresponding edentulous area. It also includes alveolar bone resorption in the anterior maxilla, pendulous tuberosities and bone resorption under the mandibular denture bases. Complete Dentures in this case made by conventional method would not retain the dentures leading to its loosening. Standard mucocompressive impression techniques are likely to result in a denture which is constructed on a cast of the flabby tissue in a distorted state resulting in dentures that is neither retentive nor stable. Application of minimally displaced or selective pressure impression techniques should serve to overcome these limitations. Impression making is a very important step in such cases. In 1964 described a technique where he took two separate impression materials in a custom tray namely 'plaster of Paris' over the flabby tissues and zinc oxide eugenol over the normal tissues [4]. Osborne described a technique where 'flabby' and 'normal' tissues were recorded by two separate impression trays and materials and then related intra-orally. Watt and McGregor described a technique where custom tray is modified and impression compound applied and a wash impression is made with zinc-oxide eugenol.

The suggested methods eliminate the excessive displacement of the soft tissues at the secondary impression; attending a physiologic and anatomic registration of the attached and the unattached tissue of the denture-bearing areas. The method described in this case report does not involve any surgical or extraclinical appointment in the construction of complete denture. Also the material used is easily available and handable by the practitioners. Polyvinylsiloxane are dimensionally stable and less brittle than plaster of paris making them handy. Due to the inherent nature of the material, consistencies of different types can be achieved during mixing by varying the application of pressure [5].

CONCLUSION

Rehabilitation of a patient with flabby maxillary ridge can be a challenging situation. If the dentures are constructed by an impression made over the fibrous

tissues in its displaceable form, the tissues will rebound back resulting in the ill-fitting of the dentures. With the modified impression techniques, these ridges can be managed effectively providing an adequate retention, stability and support helping the patient to provide proper mastication and speech.

REFERENCES

1. Srivastava S, Mishra S, Chopra D. Modified Tray with Mesh Design for the Management of Flabby Ridge: A Case Report. Front Dent. 2019;16:149-152.
2. Crawford RW, Walmsley AD. A review of prosthodontic management of fibrous ridges. Br Dent J. 2005;199:715-719.
3. Kelly E. Changes caused by a mandibular removable partial denture opposing a maxillary complete denture. J Prosthet Dent. 1972;27:140-150.
4. Xie Q, Närhi TO, Nevalainen JM, Wolf J, Ainamo A. Oral status and prosthetic factors related to residual ridge resorption in elderly subjects. Acta Odontol Scand. 1997;55:306-313.
5. Liddelow KP. The prosthetic treatment of the elderly. Br Dent J. 1964;117:307-315.