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Original Research Paper

Dentistry

CLERK'S VESTIBULOPLASTY: A CASE REPORT

Dr. Swapnil Suresh Jadhav Senior Lecturer, Department of Periodontology and Oral Implantology, YCMM and RDF's Dental College, Ahmednagar 414003, Maharashtra, India.

Dr. Nilima Shripad Rajhans Head of Department, Department of Periodontology and Oral Implantology, YCMM and RDF's Dental College, Ahmednagar 414003, Maharashtra, India.

ABSTRACT Rehabilitation of completely edentulous patients is always a difficult task. The other factors which may complicate the process are residual ridge resorption, abnormal jaw relationships, effect of trauma on edentulous ridge etc. These primary complications may lead to secondary difficulties like inadequate vestibular depth leading to failure in complete denture prosthesis. Hence this article reports in short the Vestibuloplasty technique used to overcome inadequate vestibular depth.

KEYWORDS: Edentulousness, Complete Denture, Vestibular Depth, Vestibuloplasty.

INTRODUCTION

The oral rehabilitation of patients after loss of teeth has made much progress in recent times. Vestibuloplasty, ridge augmentation and various types of implants have been used to overcome the problems of alveolar ridge.[1]

Preservation of oral vestibular height, width, and volume is essential for aesthetic appearance and functional competence.[2]

Clerk',s vestibuloplasty was given by Clerk in 1953 also known as Reverse Kazanjian technique.

It is a type of mucosal advancement vestibuloplasty wherein mucosal membrane of the vestibule is undermined and advanced to line both sides of extended vestibules.

Case Report

A 50 year old completely edentulous male patient was referred to the department of periodontology for correction of inadequate vestibular depth in mandibular anterior region.

Clinical examination of maxillary and mandibular alveolar ridges revelied insufficient height of mandibular ridge in anterior region along with shallow vestibule. So to enhance the retention of mandibular denture it was suggested to perform a Vestibuloplasty procedure. Clerk's vestibuloplasty procedure was done in this case.

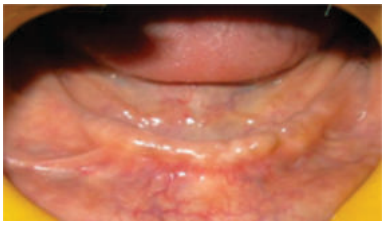

Figure 1 Pre operative Photograph

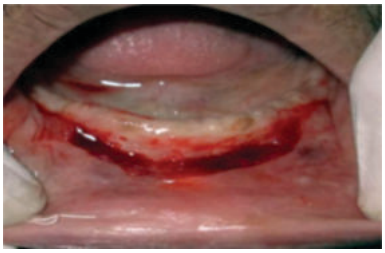

Figure 2 Horizontal incision given slightly labial to the alveoloar ridge and supra periosteal dissection is done

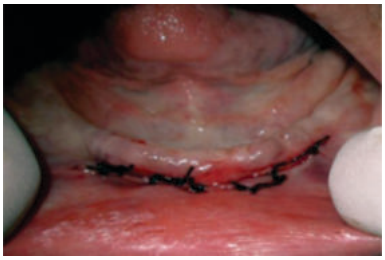

Figure 3 Labial mucosa sutured downwards and secured with periosteal suturing

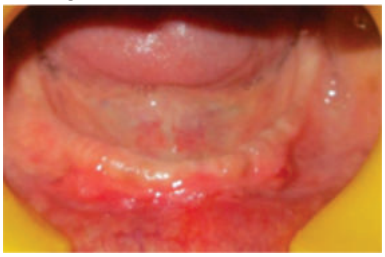

Figure 4 3 month post operative photograph

Procedure

The operation was performed under adequate local anesthetic.

A circumvestibular incision in mandibularlabio-buccal region was given with #15 surgical blade.

Thorough supra-periosteal dissection was accomplished till the desired depth and the vestibular sulcus was deepened according to standard procedure .

The raw surface on bone healed by secondary healing i.e. granulation formation and epithelization without contracture.

Patient was prescribed with Ibubrofen 400 mg twice daily and serratio-peptidase for 5 days.

DISCUSSION

The rehabilitation of resorbed edentulous mandibles can be a challenge for a variety of reasons. These may include a lack of bone, exostosis, tori, genial tubercle obstruction or an elevated floor mouth.[3]

Various methods to improve denture retention and stability have been given in literature over past years.The procedure is indicated for edentulous patients who experience

unsatisfactory denture retention and stability due to muscle and mucosal attachments located near the maxillary alveolar crest, have adequate bone height, and healthy vestibular mucosa.[4]

Clerk's vestibuloplasty is a secondary epithelial vestibuloplasty, and there in these cases there is a need to cover the exposed periosteum because a nearly complete relapse could be proven during secondary healing with contraction and epithelialization of the vestibular periosteum.

Clerk's vestibuloplasty technique uses mucosa pedicled from the lip. In this case, pre operative vestibular depth was 3 mm which was observed to be 7 mm 3 months post operatively.

CONCLUSION

The present case reported an excellent post-operative outcome showing sufficient increase in height of ridge in mandibular anterior region.

Thus it can be concluded that Clark's vestibuloplasty is relatively simpler and successful technique to achieve adequate vestibular depth in anterior region of jaw.

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