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### Sliding Lid Saliva Reservation in Maxillary Denture

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### Abstract

Saliva is very important component of the stomagnathic system and secreted from the salivary glands. Xerostomia is a subjective feeling of dry mouth. Patients can suffer due to xerostomia. Dentures with saliding lid salivary reservation in maxillary denture are one of the novel approach in management of xerostomia. we have a case report with xerostomia and modified approach to manage sliding lid salivareservation in maxillary denture can be incorporated in to a denture that provide sustained, slow and continuous release of salivary substitute.

**Keyword:** Xerostomia, Salivary Reservoirdenture, Salivary Substitute.

#### **Case Report**

A 53 year old female patient name with Sunanda sinha reported in the department of prosthodontics crown & bridge in our institution complains of intraoral complete edentulous space in upper and lower region. And difficulties in wearing old denture as they were lose. She complains of dry mouth due to systemic disease, her medical history disclose she is a diabetic on clinical examination mandibular and maxillary arches completely missing all teeth oral mucosa was dry

which resulted in positive mouth mirror test. Patient was informed about salivary reservoir denture. Patient consent was taken for the fabrication of sliding lid salivary reservation in maxillary denture and conventional mandibular denture.

Primary impression of upper and lower arches made using impression compound. Primary cast made with dental plaster. Secondary impression made with light body elastomeric impression material. Master cast were made with dental stone.

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Denture base and occlusal rim were made on the cast. Jaw relation recorded and transferred to the articulator teeth arrangement was done and tried in the patient mouth. Palatal counters recorded using tissue conditionar at the try in appointment. The trial denture was flask and dewaxing carried out. The denture was processed after packing the flask with acrylic resin materials.



Intra Oral Maxillary Arch



Intra Oral Mandibular Arch



Pre Oprative Frantal View Body Elastomeric Impresion



Secondary Impression Made With Light Materials



Salivary Reservoir Fabricated With Sliding Lid Technique



Evaluation of Salivary Reservoir Space in Waxed Up Denture



Evaluation of Salivary Reservoir Space in Acrylized Denture



Postoperative Palatal View



Postoperative Intraoral View



Postoperative - Smiling View

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### **Instruction to the Patient**

- Patient was instructed about denture lid using soft toothbrush & toothpaste
- Patient was asked to make six glass of water, milk or lemon juice
- Cheak up and recall visit were planned every month
- Instructions were given to the patients regarding denture and oral care

### Discussion

Xerostomia is difficult to chew food when the saliva is deficient. A wet bolus of food is essential or else swallowing becomes difficult. The result is that the patient relies heavily upon a liquid diet because the prosthesis may irritate the friable tissues. Various techniques have been described in the literature to incorporated salivary reservoir in complete denture.

Chattergy A and chattergy D improvised the technique of fabrication of maxillary salivary reservoir denture. The reservoir lid was made of latex membrane. The advantages are no detachable part, ease of replacement of latex membrane and relining is possible. The disadvantages are not use in patients allergic to latex and patient should take care of denture Mandibular and maxillary complete dentures with salivary reservoir to a radiation induced xerostomia patient the major disadvantage are time consuming.

### **Advantages**

- Less cost
- This is Avery simple technique
- The laboratory procedure are very less time consuming
- Very easy to use denture.
- Very easy to clean denture
- Very easy to accessibility to the reservoir by the doctor and patient.
- No additional clinical step

### Conclusion

The treatment of xerostomia is generally unsuccessful. If the dry mouth is a result of the loss of Glandular function. The use of artificial saliva and frequent mouth rinses. Particularly during meals, may be helpful coating the tissue surface. Careful diagnosis and proper management. This is a very simple technique to fabricate a sliding lid salivary reservoir in maxillary denture proved to be successful and very helpful for doctor and patients.

#### References

- 1. Winkler 3<sup>rd</sup> edition
- 2. Joseph AM et al functional salivary reservoir in maxillary complete denture-technique redefined clinical case report 2016
- 3. J prosthet dent 2005v. the glossary of prosthodontics term
- 4. Lew, j., and a smith 2007 mucosal graft-vs-host dises. Oral dis new york
- 5. Greenberg, M. S and M. Glick. 2003 Burkets oral medicine diagnosis & treatment 10<sup>th</sup> edition
- 6. Zarb GA, Bolender CL, Carlsson GE. Boucher's prosthodontics treatment for edentulous patients. 11th ed. London; ST. Louis; Mosby; 1997. p. 36.
- 7. Carlsson GE. Clinical morbidity and sequel of treatment with complete dentures. J Prosthet Dent 1998;79:17-23.
- 8. Crawford RW, Walmsley AD. A review of prosthodontics management of fibrous ridges. Br Dent J 2005;199:715-9.
- 9. Chase WW. Tissue conditioning utilizing dynamic adaptive stress. J Prosthet Dent 1961;11:804-15.
- 10. Crawford RW, Walmsley AD. A review of prosthodontics management of fibrous ridges. Br Dent J 2005;199:715-9.
- 11. Fish EW. Principles of full denture prosthesis. 7th ed.
- 12. Tench RW. Personal communication, 1952.

- 13. Chattergy A. and D Chattegee. 2014 false palate reservoir denture novel technique IOSR J.Dent Medsci 13:05-09
- 14. Chandu G.S and M. N hypo salivation in complete denture patients. Indian j. stomatol2:263-266.
- 15. Carl W., N. G.schaff and T.Y Chen1972.oral care with patient irradiated for cancer of the head neck.
- 16. Carl W1974. Oral and dental care for irradiated patient.