

Pictorial Representation of Fabrication of a Complete Denture for Clinical Undergraduate Students-A Study Article

Kalamalla A Saran Babu^{1*}, Poojitha Y², Sunke Anuradha² and Malathi Bobbala²

¹Reader, Department of Prosthodontics, Narayana Dental College and Hospital, Nellore, India

²Senior Lecturer, Department of Prosthodontics, Narayana Dental College and Hospital, Nellore, India

***Corresponding Author:** Kalamalla A Saran Babu, Reader, Department of Prosthodontics, Narayana Dental College and Hospital, India.

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Abstract

Complete edentulism in geriatric patients makes his or her personal life, social life, systemic life so miserable. Even though prosthetic dentistry has many advanced treatment options, still in our daily routine clinical practice as well as in students academic professional side, fabrication of removable complete dentures for complete loss of teeth is marked as gold standard treatment. This short study communication article is intended to enlighten every dental student about entire procedure of fabrication of complete denture by means of pictorial representation, thereby, enhancing the confidence levels of a student when he or she deals with complete edentulous conditions.

Introduction

Complete loss of teeth especially in geriatric patients makes his personal life, social life, systemic life so miserable. Even though dentistry has been advanced in many fields, still in our daily routine clinical practice as well as in student's academic professional side, fabrication of removable complete dentures for complete loss of teeth is marked as gold standard treatment.

These complete dentures bring back the confidence of his/her social life improves mastication of foods thereby avoiding indigestion problems and also prevent speech difficulties. Considering all these importance's of complete dentures, it is mandatory for every clinical undergraduate dental student to have an expertise on steps involved in fabrication of a complete denture. Hence, this article is intended to enlighten every dental student about step by step procedure of fabrication of complete denture by means of pictorial representation, thereby, improving the confidence levels of a student when he or she deals with complete edentulous conditions.

Materials and Methods

All the clinical pictures related to the patients were collected comprehensively from the 3rd, 4th clinical undergraduate students and interns (CRRRI) from the Narayana dental college and hospital, Nellore, Ap, India who have completed the fabrication of complete denture.

Step by step pictorial representation of fabrication of complete denture



Figure 1: Intra oral pictures of maxillary and mandibular complete edentulous ridge.



Figure 2: Primary impressions made with irreversible hydrocolloid alginate. A part from alginate, impression compound is also used for making primary impressions.



Figure 3: Maxillary and mandibular primary casts with type 2 gypsum product (Dental plaster casts).
Note: a: After pouring primary casts, a spacer was adapted and special tray with handles was fabricated with self cure resin. After checking the special tray extensions intraorally, border molding was completed by using greenstick compound or heavy body putty consistency elastomer. b: After completion of border molding, spacer is removed and relief holes are created for making secondary impression.

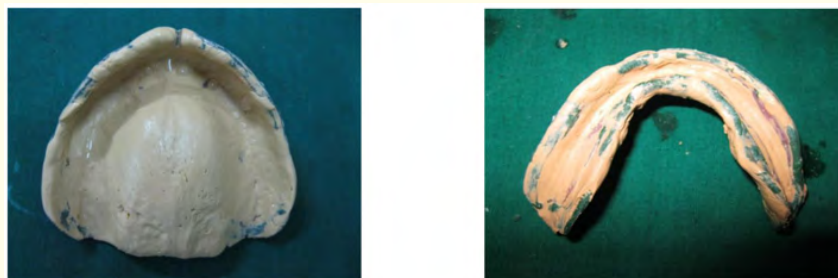


Figure 4: Maxillary and mandibular secondary/master impressions made with zinc oxide eugenol impression paste.

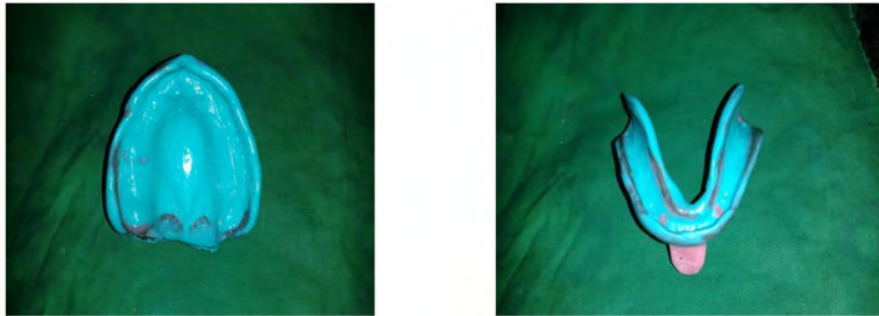


Figure 5: Maxillary and mandibular secondary/master impressions made with light body elastomer impression material.



Figure 6: Permanent maxillary and mandibular secondary/master casts with type 3 or type 4 gypsum product (Dental stone casts).



Figure 7 and 8: Figure 7: Recording maxillomandibular jaw relations. Figure 8: Teeth arrangement in 3pont articulator and clinical wx trial.



Figure 9: Processed, finished, polished permanent complete maxillary and mandibular dentures.



Patient with the dentures



Intraoral view of the patient with dentures

If complete dentures with balanced occlusion are fabricated, then face bow transfer, extraoral tracings, interocclusal records, teeth arrangement on hanau vide view semiadjustable articulator for checking protrusive and lateral ontacts should be followed



FACE BOW TRANSFER IN PATIENTS MOUTH AND FACEBOW TRANSFER ASSEMBLY TO ARTICULATOR



EXTRA ORAL GOTHIC ARCH TRACING AND INTER OCCLUSAL RECORDS

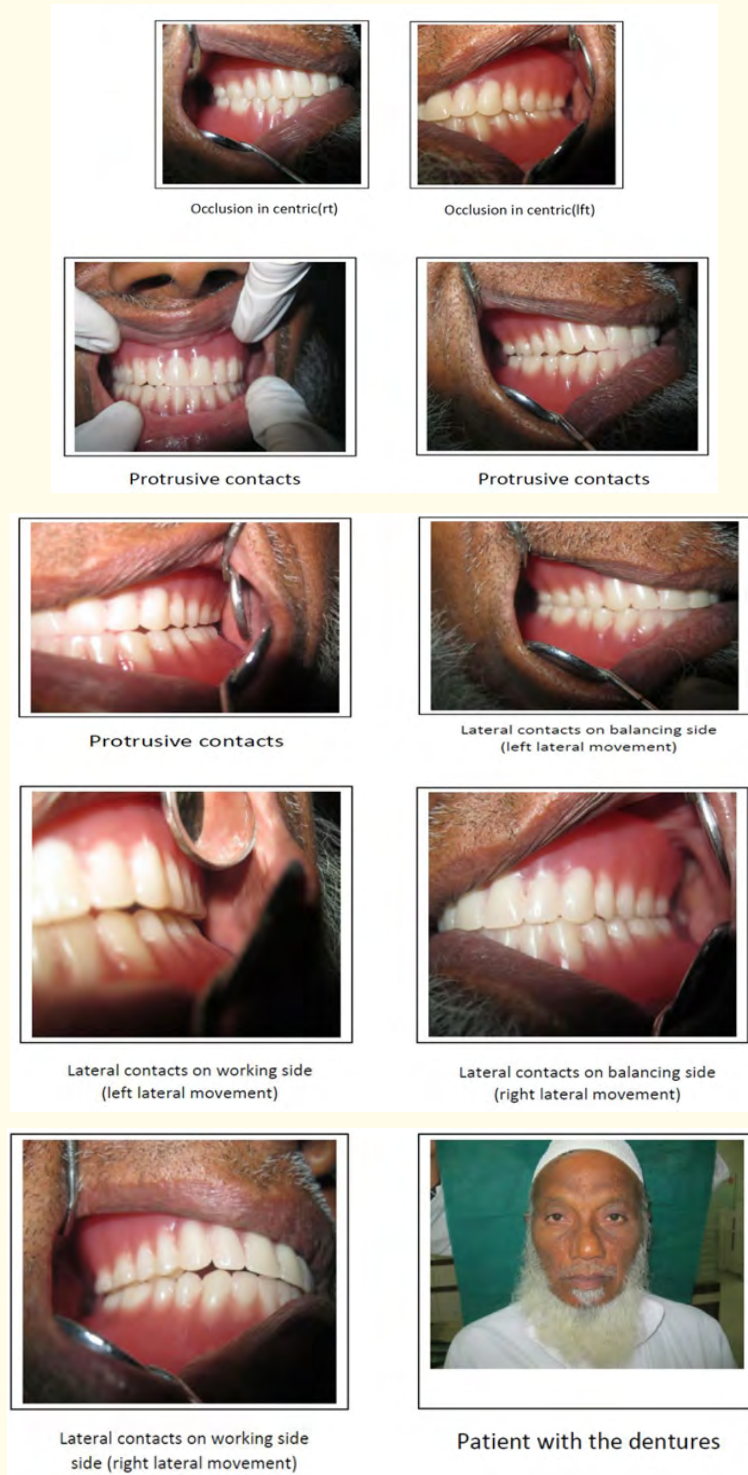


Figure 10

Discussion

Among various treatment modalities that were implemented as a part of completion of clinical curriculum for clinical undergraduate dental students, complete denture is one such major treatment that many students face more difficulties for completion. As this prosthesis involves multiple steps of combination of both clinical and laboratory steps, it keeps the students in indistinct situation, thereby keeping them in a compromised situation. Even though there are many textbooks and literature available for them, synopsis of all the steps grouped together is not available for them [1-3].

Conclusion

This study article is intended for the clinical undergraduate students for easy understandings of the entire multiple clinical and laboratory steps involved in the fabrication of complete dentures. As we are all aware of the sound impact of boosting the knowledge in learning practices is by pictorial representations, this study article was designed in pictures.

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