

Review Article

“Applying the principle of hydraulic press for recording flabby tissue”

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Abstract: Recording a flabby tissue in completely edentulous patients is a common occurrence in dental practice. The principle of recording such tissue is based on the mucostatic theory of impression making which has given rise to the commonly followed window technique of recording flabby tissue. The technique requires to paint the impression plaster over the flabby ridge in a dual impression. We present a different technique that utilizes the principle of hydraulics through the use of a plastic disposable syringe. The technique is simple, inexpensive and falls within the norms of scientific principles.

Keywords: flabby, bone resorption, mucostatic, impression theories.

INTRODUCTION

Flabby tissue has been defined as excessive, movable tissue that is present on the completely edentulous ridges. 1 The prevalence of flabby tissue or displaceable ridges are found to be present in 24% of edentulous maxillary ridges and 5% in mandibular edentulous ridges. 2 While surgical removal of such tissue should be always preferred, there are times when the amount of flabby tissue does not need surgical removal, since modification in impression technique is all that is required to overcome the problems associated with it. A number of impression techniques have been mentioned in the literature, however, the objective of all techniques is to record the displaceable tissue ‘in static form’ remains constant. A common technique that is effective in such cases is the Watson’s ‘window technique’³ while the choice of impression material that records the flabby tissue is ‘impression plaster’ or ‘dental plaster’ as suggested by Liddlelow. 4 Application of plaster of paris has been traditionally done using a small, ordinary paint brush, which gives it a name ‘paint – on technique’. 4 The drawback of this technique is that while the impression material requires multiple applications using a brush, the material applied begins to set and subsequent applications over the set plaster tends to distort the underlying mucosa

repeatedly. This also compromises the principle of tissue compression, which is required to recoil before the impression material sets.⁵ while the rest of the impression material is essentially the same (zinc oxide eugenol impression paste), the only modification in this article is recording the flabby tissue completely, quickly while allowing the tissue to recoil before the impression material sets. The technique described requires a 5 ml or a 10 ml plastic disposable syringe and a plastic microtip that would fit the needle adapter of the syringe barrel.

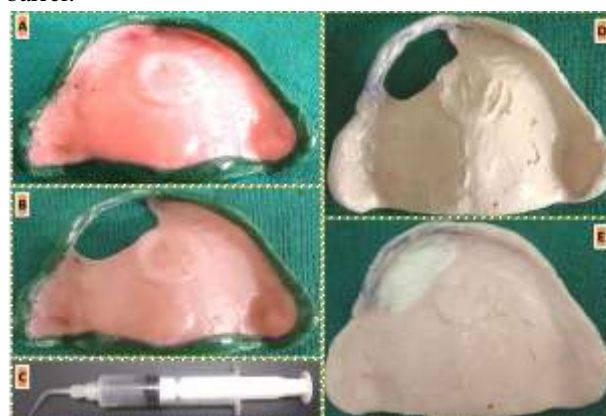


Figure 1: (A) Border molded custom tray (B) Window in the flabby area (C) Disposable syringe with microtip (D) Completion of zinc oxide eugenol impression (E) Completed impression

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Discussion

Various techniques have been proposed to record the flabby tissue, but there is hardly any significant deviation from the original. The technique mentioned in this article is simple, economical and effectively records the flabby area without compromising the objectives of recording any flabby tissue condition. The technique has two advantages over the conventional paint on technique. Firstly, the entire impression material can be placed on the flabby area in a short period of time while the material is in fluid stage. Application of impression material using a paint on the brush is time consuming and since plaster sets quickly, the clinician tends to apply material rapidly, which in turn may result in excess application of force in the recording material. Use of the current technique is particularly advantageous in large areas of flabby tissue like the one found on mandibular residual alveolar ridges. The continuous force application on the plunger of the plastic syringe also does not allow the plaster present within the syringe to set. This in turn maintains a constant flow throughout the recording of the flabby tissue.

Another important advantage of the above mentioned technique is that the desired material can be applied in a particular area in a sequential manner like that mentioned in recent literature.⁵ This allows proper

recoiling of the flabby area after being initially compressed. The area can be filled in one shot in any direction that the clinician desires while at the same time maintaining the flow properties of the entire recording material constant throughout the procedure.

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Disclosure

Authors have no conflict of interest with any individual, representative or agent of any company during the trial of the technique or while publishing the actual study.

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