

ORIGINAL RESEARCH

Complete Denture Impression Techniques Practiced by Private and Government Dental Practitioners in Himachal Pradesh: A Survey

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ABSTRACT:

Impression making is an important step in fabricating complete dentures. A survey to know and compare the materials used and techniques practiced by dental practitioners in Government setup and in private clinic setup while recording complete denture impressions was conducted. Except for usage of elastomeric impression material in making final impression, there is not much of difference in materials between private clinic setups and government hospitals.

Keywords: Impressions, Custom-trays, Base plate, Tray-material, Spacer, Design

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INTRODUCTION

Impression making is an important step in making complete dentures. A survey was carried out to know which materials are used by private practitioners and which materials are used by Government dental practitioners to make impressions and what techniques are being followed by them respectively. Feedback was evaluated.

MATERIAL AND METHODS

A questionnaire was prepared and sent to 120 dental practitioners. Only 100 responded. The practitioners were in the age group of 30–50 years. The dental surgeons were from different places of Himachal Pradesh - Kangra, Una Shimla, Solan. The practitioners were from different Government hospitals and private clinics with group of 50 each.

The questionnaire had five questions.

Q. 1 Which material do you use to make primary impressions of edentulous mouth?

- (a) Impression compound
- (b) Alginate
- (c) Any other (please specify)

Q. 2 Do you make a custom tray for final impression of edentulous jaw?

- (a) Yes
- (b) No

If yes, what material is used to fabricate the custom tray?

- (a) Base plate
- (b) Tray material/cold cure
- (c) Any other (please specify)

Q. 3 Do you use spacer in the custom tray?

- (a) Yes
- (b) No

If yes, what design of the spacer do you use?

- (a) Full spacer with tissue stops
- (b) Full spacer without tissue stops
- (c) Any other design (please specify)

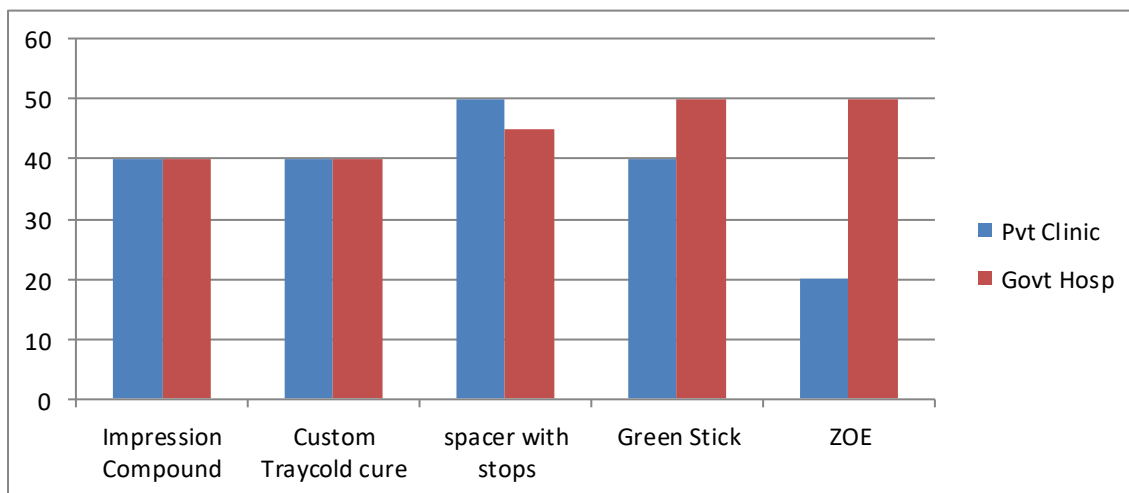
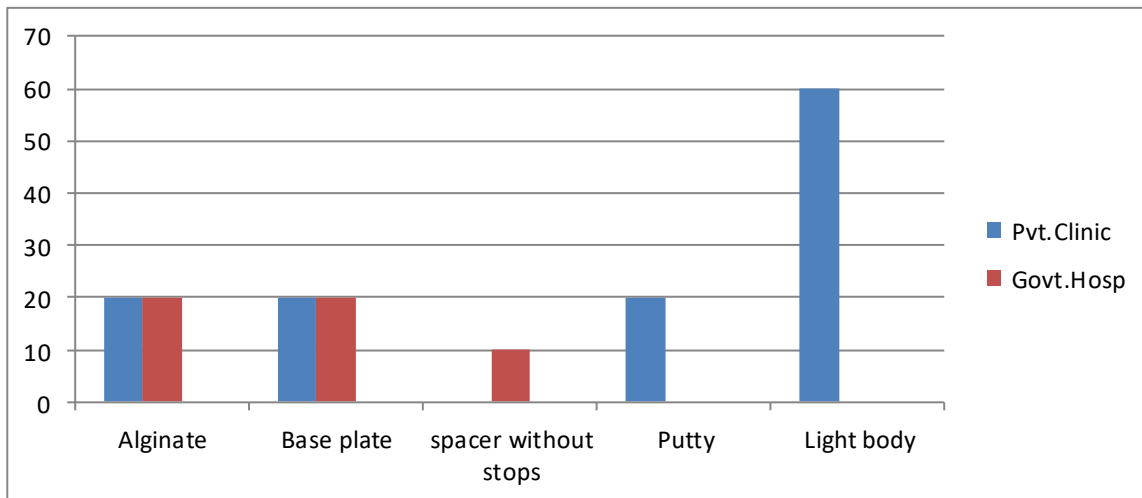
Q. 4 Which material do you use to carry out border molding?

- (a) Green stick (low fusing compound)
- (b) Putty (rubber base)
- (c) Any other (please specify)

Q. 5 Which material do you use for making the final impression of edentulous jaw?

- (a) ZnOE paste
- (b) Light body (rubber base)
- (c) Any other (please specify)

RESULTS



It was observed that 80 % use impression compound to make primary impressions, 20 % use Alginate. It was same for both Government hospitals as well as private practitioners. Even in material used to fabricate custom trays readings were same 80% were using cold cure and 20 % were using base plate in Government hospitals and private practitioners. All practitioners in private clinic were using full spacer with tissue stops in custom trays whereas in Government hospitals 90% of practitioners were using spacer with tissue stops while 5% were using spacer without tissue stops. In private clinics 80% of practitioners were using green sticks whereas 20% were using putty for border molding. In Government setup 100% practitioners were using green sticks for border molding. The main difference between two setups is created by material used for making final impression that is in private setup while 60% practitioners were using light body impression material and 40% were using Zinc oxide –eugenol. All the practitioners in government set up were using Zinc oxide –eugenol for making final impressions.

DISCUSSION

Impression making is an important step in denture construction. Primary impressions are made in a non perforated stock metal tray with impression compound. Irreversible hydrocolloid i.e. alginate can also be used in a perforated stock metal tray. As the stock metal trays are used impression material thickness of 4 mm is recommended. Use of alginate is preferred by some authors for primary impressions. In UK it was observed that 88 % dental graduates use alginate for making primary impressions where as 99 % gave alginate preference as primary impression material. In a survey in North American Dental Schools 74 % preferred alginate to make primary Impressions where as 15 % preferred impression compound. In survey in UK, 88 % practitioners use alginate to make primary impressions of complete denture cases. In Southern India, It was observed that 78 % use impression compound to make primary impressions, 21 % use Alginate. For fabricating custom trays 67 % use tray material or cold cure while 33 % still use base plate custom trays. The design of the spacer used by 72 % is full spacer with tissue stops.

About 21 % use full spacer without tissue stops. 7 % use other designs like a spacer covering incisive papilla mid palatine suture area.

Those using base plate custom trays do not use spacers. The border moulding material used by 83 % is low fusing compound (Green stick). 17 % use putty elastomer. For making final impressions 73 % use ZnO or non-eugenol pastes. 19 % use light body elastomer. But 8 % still use “alginate” to make final impressions. In Himachal Pradesh, It was observed that 80 % use impression compound to make primary impressions, 20 % use Alginate. Even in material used to fabricate custom trays readings were same 80% were using cold cure and 20 % were using base plate in Government hospitals and private practitioners. . In private clinics 80% of practitioners were using green sticks whereas 20% were using putty for border molding. In Government setup 100% practitioners were using green sticks for border molding. is in private setup while 60% practitioners were using light body impression material and 40% were using Zinc oxide –eugenol. All the practitioners in government set up were using Zinc oxide –eugenol for making final impressions.

CONCLUSION

Almost all the impression techniques are satisfactory. Considering primary impression both alginate and impression compound can be used. Final impression in cold cure border molded custom tray can be made with ZnO paste or light body elastomer. Use of alginate in a custom tray cannot be justified. In ZnO and light body elastomer, later with no doubt requires less efforts,

comfortable to the patients, and easy to handle. But its usage depends upon the availability of the material in Government hospitals. Except for usage of elastomeric impression material in making final impression, there is not much of difference in materials between private clinic setups and government hospitals.

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