

treatment. Those with a high IAT cooperation score were significantly more likely to strongly recommend extraction for Black patients, along with those with a high IAT race score.

When interactions between IAT and the root canal treatment recommendation were assessed, only the race IAT score was significantly different. Those who didn't recommend a root canal were more pro-White on IAT race determinations for White patients than Black patients. Thus not recommending root canal treatment may be the result of racial bias.

DISCUSSION

The decisions of the survey participants to recommend root canal treatment were affected by the patient's race, with a bias toward root canal therapy for White patients and extraction for Black patients. Clinicians tended to have a pro-White bias in both race and cooperation tests without reference to the patient's condition.

Clinical Significance

Racial bias may influence the decision of the clinician for dental care. Extractions were more likely to be recommended for Black patients, and root canal therapy was recommended for White patients.

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Reprints available from N Patel, Postgraduate Endodontic Unit, King's College Dental Inst, Guys Hosp, Flr 25 – Tower Wing, London SE1 9RT, UK; e-mail: nehanpatel1@gmail.com

REMOVABLE PROSTHODONTICS

Conventional versus simplified impression methods



BACKGROUND

Edentulous individuals are common throughout the world. The masticatory performance of these persons is poor compared to that of individuals who have a complete dentition. The poorer masticatory performance results in reduced maximum bite force; difficulties chewing several food types, especially fresh fruit and raw vegetables; illnesses such as obesity, diabetes, cardiovascular disease, and some cancers; and inadequate nutrient intake, leading to weight loss and an increased susceptibility to frailty. Providing complete dentures to these individuals requires several steps, but practitioners have taken measures to simplify the impression procedure, making it a 1-step rather than a 2-step process. The effects of conventional impression methods versus the simplified methods were investigated.

METHODS

Twenty-seven individuals who were edentulous in both arches and currently using dentures were in need of new dentures. They participated in this single blind randomized controlled crossover clinical trial, receiving either a conventional or a simplified denture for 1 arch, then the alternate denture for the other arch. The two groups were designated as C-S or S-C for conventional-simplified or simplified-conventional, and individuals were randomly assigned to each group.

The conventional method used alginate impression materials in a metal edentulous impression tray in the first step. The border of the denture was outlined on the study model, which was fabricated after the preliminary impression. Custom trays were made in an autopolymerizing resin, then a final impression was made using the custom tray border molded with 2 red and green stick impression compounds and silicone impression materials.

In the simplified method, master casts were made from the preliminary impression as the definitive impression only for the mandible. Although for the conventional method the master casts were made from the initial impression, for the simplified method, the clinician determined the border of the denture on the cast by referring to anatomical landmarks. Once the impressions were made, all the procedures for both methods were the same.

Patients received their new denture, then adjustments were made 4 times, after which assessments were made. A 1-month washout period was observed, when patients were instructed to use their old dentures, with adjustments as indicated. The new complete denture fabrication process was then begun using the alternate fabrication method. Participants continued to use their old dentures and were not to use their newly fabricated ones. The outcomes measured during the assessment were mixing ability, as indicated by color-changeable chewing gum;

maximum occlusal force; occlusal contact area; and perceived chewing ability.

RESULTS

Twenty-four individuals completed the process. No significant differences were noted between the 2 groups in mixing ability, maximum occlusal force, or perceived chewing ability. However, the dentures made according to the conventional method had a significantly larger occlusal contact area than those made using the simplified method.

DISCUSSION

Dentures made using the conventional impression method demonstrated a significantly larger occlusal contact area than those made using the simplified method. No differences between the dentures made using the 2 impression methods were noted in mixing ability, maximum occlusal force, or perceived chewing ability.

Clinical Significance

The larger contact area provided by the conventional impression method potentially contributes to earlier stability of the new dentures. Both patients and dentists will benefit from the shorter period of time required for adaptation to the new dentures and the reduced number of adjustments needed for the dentures.

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Reprints available from M Kanazawa, Gerodontology and Oral Rehabilitation, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental Univ, 1-5-45 Yushima, Bunkyo, Tokyo, 113-8549, Japan; e-mail: m.kanazawa.gerd@tmd.ac.jp