

TIPS FROM OUR READERS

An impression technique for patients with fixed orthodontic appliances



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An irreversible hydrocolloid impression is difficult to obtain in patients with fixed orthodontic appliances because the material is trapped by the bands, brackets, and wires, all of which may dislodge the impression material from the tray and even debond the orthodontic brackets.^{1,2} Covering the orthodontic brackets and arch wire completely or only on the gingival side with wax^{2,3} has been proposed, but the cast will reproduce the wax used.

In the technique described, the orthodontic brackets are covered with silicone putty, which may be removed with the impression material or replaced in the impression if it is not removed, improving the detail in the cast.

PROCEDURE

1. Use an addition- or condensation-type silicone putty (Optosil Comfort Putty; Kulzer GmbH) to cover the retentive regions gingival to the orthodontic bands, brackets, and wires (Fig. 1).
2. Make an irreversible hydrocolloid (Hydrogum 5; Zhermack) impression according to the manufacturer's instructions and standard practice, by using the centrifugal mixer (Alghamix II; Zhermack).⁴
3. Remove the impression from the patient's mouth. Either the silicone putty impression material will be removed with the irreversible hydrocolloid (Fig. 2A)

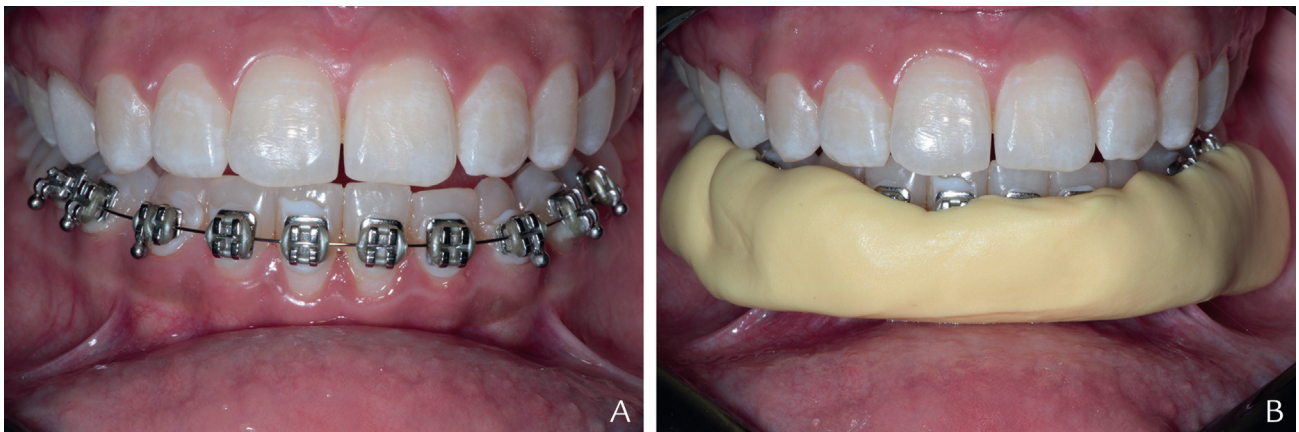


Figure 1. A, Patient with mandibular orthodontic appliance. B, Condensation-type silicone putty adapted to appliance.

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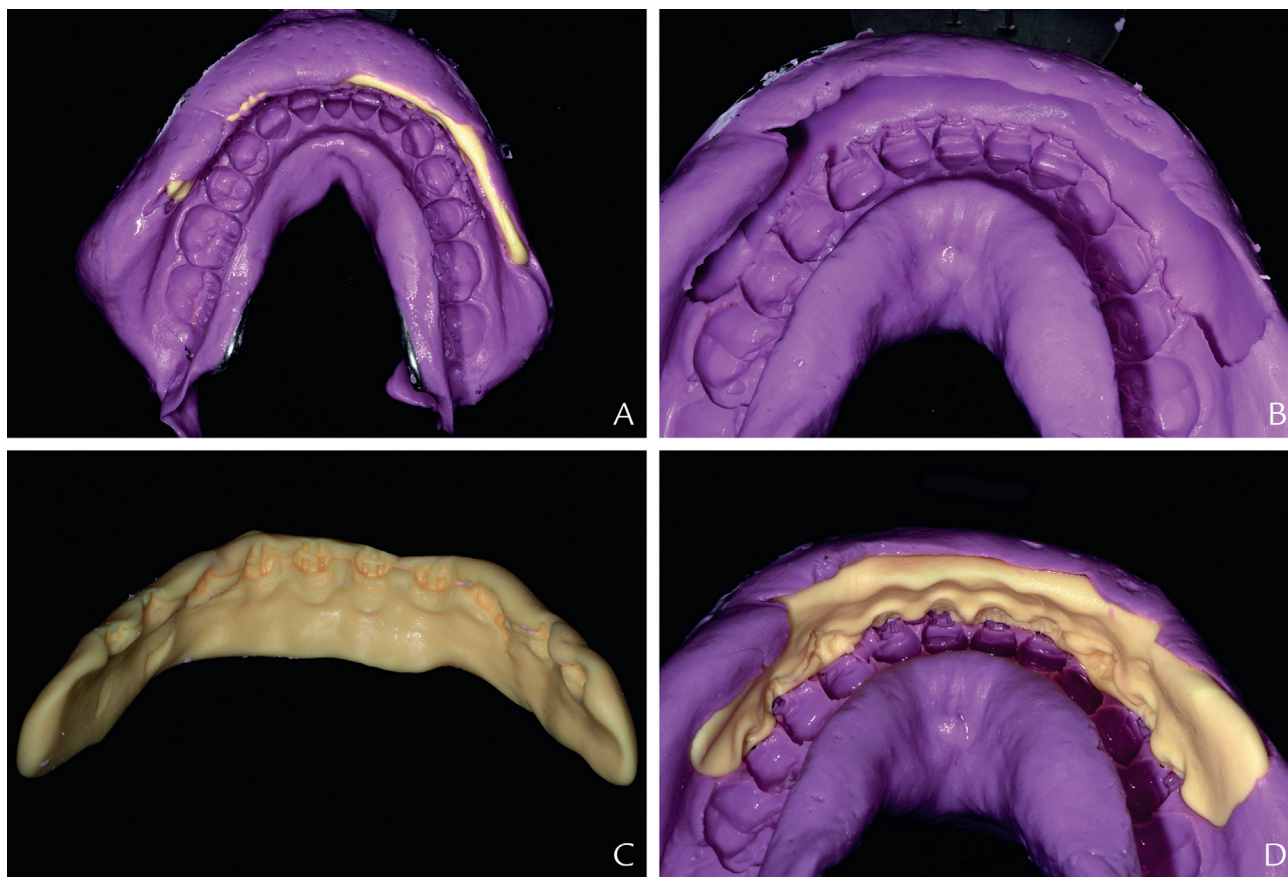


Figure 2. Dental impressions. A, Silicone putty removed with irreversible hydrocolloid. B, Impression when silicone putty not removed. C, Silicone putty. D, Silicone putty repositioned in irreversible hydrocolloid impression.



Figure 3. Cast. A, Right view. B, Frontal view. C, Left view.

or it will remain in the mouth. In that case, remove the silicone putty and replace it in the dental impression (Figs. 2B-D).

4. Box, pour (Durone IV; Dentsply Sirona), and evaluate the cast (Fig. 3).

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