

TIPS FROM OUR READERS

Use of aluminum foil to facilitate open-tray implant impressions



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When the conventional impression technique is selected over digital optical scanning for multiple implants, the open tray impression technique has been recommended over the closed tray or transfer technique in situations where 4 or more implants are present.^{1,2} The open tray technique incorporates a large opening in the impression tray that accommodates the complete-arch impression copings.³ While loading the impression material into the tray, preventing the material from escaping through the opening is often difficult. Different methods or materials have been proposed to temporarily seal the opening during impression material loading, including wax^{4,5} and a plastic sheet in a commercially available self-perforating tray.⁶ Of the previously recommended techniques, a wax tray closure can be messy, and the abutment screw does not always pierce the wax. The use of a self-perforating tray with a plastic sheet allows visualization of the impression copings but is less accurate than the conventional open tray impression.⁶

In this article, the use of standard household 0.016-mm aluminum foil facilitates the impression procedure. With the described technique, adequate temporary sealing is provided during impression material loading. The aluminum foil is sufficiently rigid to hold the impression material in the tray while being easily penetrated by the open tray impression copings. The operator can easily see the impression copings and find the screws at the time of the impression removal.

TECHNIQUE

1. Fabricate a custom impression tray (Preci Tray; Yeti Dental GmbH) with holes large enough to

accommodate the impression copings (Impression Coping Open Tray, Bridge; Nobel Biocare).

2. Evaluate the impression tray in the mouth with the splinted impression copings in place. Make adjustments to the tray to ensure that the impression copings extend beyond the tray.
3. Apply tray adhesive (VPS Tray Adhesive; 3M ESPE) and adapt an appropriately sized standard household aluminum foil (Standard Aluminum Foil; Reynolds Consumer Products) from intaglio surface of the tray to cover the hole. Then, reapply the tray adhesive over the adapted aluminum foil (Fig. 1).
4. Load the impression material (Aquasil Smart Wetting Impression Material; Dentsply Sirona) to fill the tray.

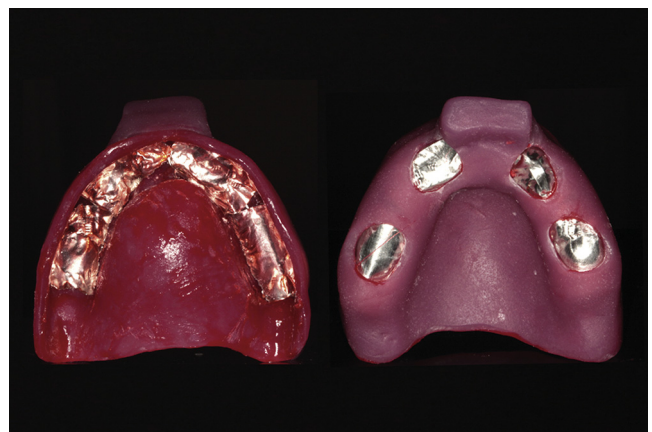


Figure 1. Tray adhesive applied before and after adapting aluminum foil to intaglio surface of custom tray.

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Figure 2. Impression copings exposed after penetrating aluminum foil.

5. Make the impression. The impression copings will automatically pierce the aluminum foil (Fig. 2).

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