

A technique for border molding with light-polymerized resin

A. Olivieri, CDT,^a A. G. Zuccari, MD, DDS, MSD,^b and D. Olivieri, DDS^c
Isodent Dental Laboratory, Ancona, Italy

A method for border molding a custom tray for removable prosthodontics with a light-polymerized resin is presented. The material has several advantages; it requires less armamentarium than modeling plastic impression compound, may be border molded in a single step, can be corrected in single areas, and may be used in areas where the tray may be underextended.

PROCEDURE

1. Fabricate an acrylic resin custom tray on the diagnostic cast. This step should be completed 24 hours in advance to allow polymerization shrinkage of the tray before impression making.
2. Evaluate the custom tray intraorally for proper extension.
3. Use light-polymerized tray resin (SpectraTray; Ivoclar Vivadent AG, Schaan, Liechtenstein or Triad; Dentsply International Inc, York, Pa) of a different color than the resin used for the custom tray. Roll the resin into a stick and adapt to the tray's periphery (Fig. 1).
4. Position the tray in the mouth and border mold.
5. Partially polymerize the resin border with an intraoral light-polymerizing unit (Heliolux; Ivoclar Vivadent AG) and remove the tray.
6. Evaluate the tray for overextended areas, identified by the color of the tray resin appearing through the washed away periphery material (Fig. 2). In situations where overextension is present, correct the tray extension and reborder mold with new light-polymerized resin.
7. Thoroughly polymerize the resin border in a light-polymerizing chamber (Targis power; Ivoclar Vivadent AG) when border molding is complete.
8. Refine the custom tray and trim the border slightly, leaving space for the impression material.
9. Make a final impression, box, and pour in stone with the technique of choice.
10. Remove the tray from the master cast by gently heating the tray slightly, taking care not to apply an open flame directly on the stone cast.



Fig. 1. Color contrasting light-polymerized tray resin positioned on tray border.

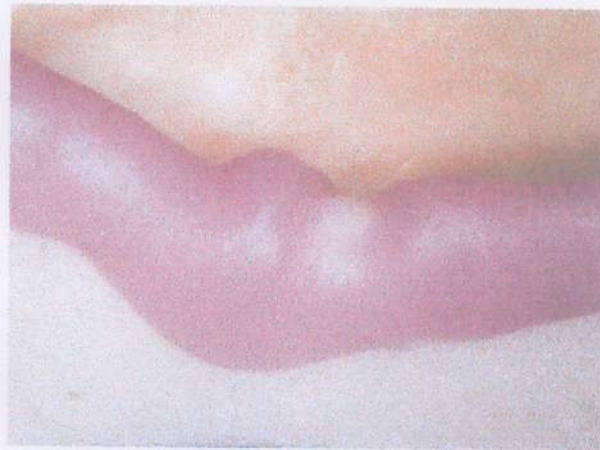


Fig. 2. Overextensions of custom tray are identified by color of tray resin appearing through periphery material.

Reprint requests to:
MR ALBERTO OLIVIERI
ISODENT DENTAL LABORATORY
VIA GOITO, 4
60121, ANCONA
ITALY
FAX: 39-071-200651
E-MAIL: isodent.olivieri@libero.it

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^aDental laboratory owner, Ancona, Italy.

^bPrivate practice, Bologna, Italy.

^cPrivate practice, Ancona, Italy.

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