

A novel technique for two-step dental impressions

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An accurate impression is a prerequisite for manufacturing well-fitting indirect restorations. Among the broad range of impression techniques and materials, the use of stock trays combined with vinyl polysiloxane (VPS) materials is very popular, as it is accurate and simple. The impression can be conducted in a one- or two-step procedure, with the latter having the advantage of no need for auxiliary personnel. The major drawback of the classic two-step technique is the increased intraoral setting time of the impression materials, and the need for relief space making for the low viscosity material.

The objective of this poster was to describe a novel technique for taking two-step putty-wash dental impressions with reduced intraoral time and no need for material relief after the first impression and still no need of an assistant.

Clinical procedure





1. Initial situation before tooth preparations

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2. An alginate impression is taken from the unprepared teeth. Alternatively, the diagnostic wax-up or the provisional restorations can be used.

3. The alginate impression, which will be poured with gypsum.

4. The gypsum cast

5. The finished tooth preparations

6. Equal amounts of the putty material (base and catalyst) are hand-mixed.





7. The putty material is placed onto a metal perforated stock tray.

8. A PVC film is placed on the putty material

9. A preliminary impression (1st step) is taken from the gypsum cast.

10. A wiggling motion is performed in order to create relief space for the wash material.

11. After setting of the putty material, the impression is taken off from the cast.

12. The PVC film is removed.

13. The light body material is placed onto the prepared teeth.

14. The light body material is placed also over the putty material of the preliminary impression

15. Then the tray is seated.16. After setting of the light material, the impression is removed from the oral cavity.

This modified two-step impression technique with an extraoral and intraoral component, offers reduced chairside time compared with the classic alternatives of two-step impression techniques. Furthermore, the relief space is already formed using a cast, the PVC film and a wiggling motion. Therefore, there is no need for space relief with bur or scalpel after the setting of the first step with the putty material.

Bibliography

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