

Simultaneous Placement of Direct and Indirect Transfer Copings in Implant Level Impression : A Case Report

Abstract:

Implant level impressions are usually made with custom trays. This article describes the simultaneous use of open and closed tray transfer copings using stock tray.

Key-words: Implant level impression, Direct transfer coping, Indirect transfer coping

Introduction:

Accurate impressions for implant prosthesis serve as a starting point for fabrication of good definitive restorations. An impression made at implant level is preferred as it allows for the selection of the appropriate abutments and is helpful in situations where angulations of the abutments is difficult to be determined intraorally. This article describes a technique for making implant level impression using direct and indirect transfer copings and putty relined technique on stock tray.

Procedure:

1. The healing abutments were removed followed by placement of direct transfer coping (Biohorizons) in 14 region and indirect coping (Biohorizons) in 13 region.
2. This was followed by making of impression using putty light body addition silicone (3M ESPE Express Xt VPS Impression Material) using plastic stock tray. Holes were made in 14 region for access of transfer coping screw.
3. The impression was retrieved and analogs were placed on transfer copings. (Fig1, Fig2)

Fig. 1) Impression with indirect transfer coping

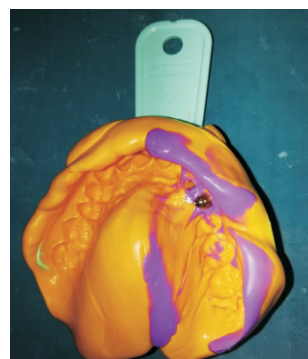


Fig. 2) Impression with direct and indirect transfer copings with lab analogs

¹VASANTHA VIJAYARAGHAVAN, ²PREET SONI, ³DARSHANA MUNDHE, ⁴RUPALI PATIL

^{1,3,4}Department of Prosthodontics, Bharati Vidyapeeth Dental College and Hospital, Pune, Maharashtra.

²Consultant Prosthodontist, Maharashtra

Address for Correspondence:

Dr. Vasantha Vijayaraghavan
Professor,
Department of Prosthodontics,
Bharati Vidyapeeth Dental College and Hospital,
Pune, Maharashtra.
Email : vijayvasuhome@hotmail.com

Received : 4 May, 2022, **Published :** 30 Sep., 2022

Access this article online	
Website: www.ujds.in	Quick Response Code 
DOI: https://doi.org/10.21276/ujds.2022.8.3.15	

How to cite this article: Vasantha, Soni, P., Mundhe, D., & Patil, R. (2022). Simultaneous placement of direct and indirect transfer copings at implant level impression - A case report. UNIVERSITY JOURNAL OF DENTAL SCIENCES, 8(3). 66-67



Fig. 4: The jig trial was done and the accurate fit of components was confirmed with intraoral periapical radiographs. (Fig.3)Further steps were carried out for fabrication of prosthesis.



Fig. 3: Radiographic verification of jig trial

Discussion:

Impressions using indirect and direct transfer coping may prove to be accurate when used for implants placed parallel to each other. Stock trays when chosen appropriately could show favorable results comparable to custom trays. Moreover, it is easy to use in a clinical setup. It saves time.[1]

Both addition silicone and polyether have proven to be suitable impression materials for implant level impressions.[2,3] In this case, both indirect and direct transfer copings were used for making an impression simultaneously and they were confirmed with jig trial. The impressions were made with single step putty light body addition silicone. A study reported that there was no significant difference in marginal gap between one-stage and two-stage putty-wash

impression techniques and monophasic light-body impression technique [4]. In future studies are recommended to explore such situations using different impression materials for parallel placed implants.

References:

1. Gupta.S, Narayan A.I, Balakrishnan.D. In Vitro Comparative Evaluation of Different Types of Impression Trays and Impression Materials on the Accuracy of Open Tray Implant Impressions: A Pilot Study. *Int. J. Dent.* 2017, Article ID 6306530. <https://doi.org/10.1155/2017/6306530>
2. C.C. Hsu, P. L. Millstein, and R. S. Stein. A comparative analysis of the accuracy of implant transfer techniques. *J Prosthet Dent* 1993; 69:588–593,.
3. R. M. Humphries, P. Yaman, and T. J. Bloem, The accuracy of implant master casts constructed from transfer impressions,” *Int J Oral Maxillofac Implants* 1990; 5:331–36.
4. R. P. Vitti, M. A. B. Silva, R. L. X. Consani, and M. A. C. Sinhoreti, Dimensional accuracy of stone casts made from silicone-based impression materials and three impression techniques, *Braz Dent J.* 2013; 24:498–502.