

## **Comparison of Direct and Indirect Techniques to Develop Customized Implant Impression Copings: A Pilot Study.**

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The aim of this pilot study was to compare a direct and an indirect technique for fabricating customized impression copings. The accuracy of these techniques to capture the tissue contours that have been developed using implant-supported fixed interim restorations (ISFIRs) in single implants for their esthetic value were evaluated. Five patients presenting with maxillary central incisor ISFIRs were enrolled in the study. Customized impression copings were fabricated using a direct and an indirect technique. Specimens of experimental (direct and indirect technique) and control groups (ISFIR) were compared in terms of linear measurements on their buccolingual (BL) and mesiodistal (MD) dimensions at three different levels: platform, middle, and gingival margin. Statistically significant differences were detected between the control group and the direct technique specimens on both the gingival margin and middle levels ( $P < .05$ ). Between the direct and indirect techniques, statistically significant differences were found in their MD and BL dimensions at the gingival margin level (G-MD, G-BL) and the buccolingual dimension at the middle level (M-BL) ( $P < .05$ ). The indirect technique used for the fabrication of customized implant impression copings seems to be more accurate in capturing the profile of the ISFIR at all three levels (platform, middle, and gingival margin). The direct technique is accurate only at the platform level.