

## **A basic study on accuracy of a zirconia coping fabricated by CAD/ CAM system-Effect of abutment modification-**

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### **Abstract**

The purpose of this study was to evaluate the influence of 2 different abutment tooth forms (for metal coping and CAD/CAM coping) on fitting accuracy of zirconia coping. Zirconia coping were made of a semi-sintered zirconia block (Cercon<sup>®</sup> base, DeguDent) using the dental CAD/CAM system (Cercon<sup>®</sup> brain, DeguDent). Fitting accuracy was evaluated by a cement-replica technique with white and blue silicone materials. After the cement-replica specimens sectioned, the thickness of the cross-sectioned white silicone layer was measured on 5 points. For the zirconia coping specimens, the mean discrepancy of fitting gaps were over 120  $\mu\text{m}$  between die and zirconia coping at all points in each group. This study suggested that the zirconia coping fabricated by this system was required more precision on fitting accuracy.

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