

THE EFFECT OF DIFFERENT TYPES OF POSTS AND CROWNS ON FRACTURE STRENGTH OF ENDOTICALLY TREATED TOOTH

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ABSTRACT

The present study was done to evaluate the fracture resistance of endodontically treated teeth with different types of posts and crowns. The endodontically treated teeth were randomly divided into four groups according to the type of post (Zirconia, carbon fibre, Titanium and Alumina post). Then the groups were divided into two subgroups according to the type of crown, In-Ceram crown for one subgroup and In-Ceram spinal crown for the other subgroup. The highest failure load was recorded in case of titanium post and the lowest failure load was in the case of Zirconia post. In-Ceram alumina crown showed higher fracture load than In-Ceram spinal crown. Scanning electron microscope of the fracture specimens showed cohesive fracture within the porcelain.

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