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**Fracture Resistance of Endodontically Treated Teeth Restored with  
 Endocrowns of Two Different Materials and Intrapulpal Extensions –  
 An In Vitro Study**

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**INTRODUCTION:**

Rehabilitation of endodontically treated teeth is a challenge as they are very different from vital ones; there is much dissimilarity that represented as changes in dentin composition and the evident loss of natural tooth structure. Many treatment modalities have been proposed for rehabilitation of endodontically treated teeth, such as traditional intracoronal post systems and directly placed adhesive restorations<sup>1</sup>. Endodontic treatment is generally associated with reductions in both the resilience and fracture resistance of the treated teeth. Moreover, the depth and design of an endodontic access cavity compromises the strength of a tooth, resulting in an increased susceptibility to fractures<sup>2,3</sup>.

The decision of restorative technique would depend mainly on remaining tooth structure to assure function and prevent fracture. A reinforcing ferrule design for the restoration is commonly recommended after endodontic treatment to reduce fracture susceptibility using complete crowns that cover all cusps<sup>4,5</sup>. Composite resin restorations or adhesive ceramic inlays that provide internal reinforcement of teeth without occlusal coverage have been advocated<sup>6,7</sup>.

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