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[\[PDF \(2223K\)\]](#) [\[References\]](#)**Zirconia ceramic post systems: a literature review and a case report**[Zeynep ÖZKURT](#)¹⁾, [Ufuk ISERI](#)¹⁾ and [Ender KAZAZOGLU](#)¹⁾

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Abstract:

Cast metal post-core systems have a long history of successful use because of their superior physical properties. However, their high elastic modulus can cause stress concentrations within the surrounding radicular dentin, resulting in root fractures. Moreover, the increasing demand for more esthetically appealing and biocompatible restorations has led to the development of tooth-colored, translucent, metal-free post-core systems. Notably, prefabricated zirconia ceramic post systems have been introduced to satisfy this trend toward a heightened awareness of esthetics, whereby the translucency of all-ceramic crowns can be successfully maintained with the use of ceramic post-core materials. Owing to the keen interest in and widespread use of zirconia ceramic post systems, many *in vitro* studies on zirconia posts have been published in the last 15 years. The aim of this article was to present data about the retention, fracture resistance, microleakage, light transmission, esthetic advantages, and radiodensity of zirconia posts. Two clinical survival rate studies were also presented. Based on the results of these studies, zirconia posts have been shown to improve the esthetic quality of all ceramic crowns and thus their usage is recommended. Apart from literature review, a case report in which a fractured fiber post was replaced with a custom-made zirconia post was also presented.

Key words:[Zirconia post](#), [Clinical experience](#), [In vitro studies](#)[\[PDF \(2223K\)\]](#) [\[References\]](#)

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