Push-out bond strength of gutta-percha with a new bioceramic sealer in the presence or absence of smear layer.

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Source
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Abstract
0.69). The mode of bond failure was mainly cohesive for all groups. In conclusion, the bond strength of the new bioceramic sealer was equal to that of AH Plus with or without the smear layer. (P = 0.89). The presence or absence of smear layer did not significantly affect the bond strength of filling materials (P = 0.69). The purpose of this study was to compare the bond strength of a new bioceramic sealer (EndoSequence BC Sealer) and AH Plus in the presence or absence of smear layer. Extracted single-rooted human teeth were prepared and randomly divided into four groups. In groups 1 and 3, the root canals were finally irrigated with 5.25% NaOCl and smear layer was not removed, but in groups 2 and 4, the root canals were finally irrigated with 17% EDTA followed by 5.25% NaOCl in order to remove the smear layer. In groups 1 and 2, the root canals were obturated with gutta-percha/AH Plus, but in groups 3 and 4, obturation was performed with gutta-percha/EndoSequence BC Sealer. Push-out bond strength and failure modes were evaluated. The bond strength of gutta-percha/AH Plus and gutta-percha/EndoSequence BC Sealer was not significantly different (P = 0.89).
