Fiber post systems: a literature review

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Abstract: Introduction: Fiber posts are available in translucent and toothcolored versions (the original black carbon posts are passé), which are aesthetically invisible under all ceramic crowns, veneers and resin restorations, and also mitigate the effects of the dark root syndrome. This article presents a review of published literature examining fibre-based endodontic post systems.

Method: All clinical studies published since 2000 in dental journals pertaining to fibre-based post systems. Articles were reviewed by a single observer and subject to meeting inclusion criteria were included in the review.

Results: The results indicated that fiber posts in combination with bonding/luting materials may be used routinely for restoring endodontically treated teeth. Mechanical failure of restored teeth with fiber posts can be related to the amount of residual coronal structure.

Conclusion: Review indicated that (1) most published literature on fibre-based posts took the form of laboratory analyses; (2) evidence for carbon-fibre posts far exceeds that for quartz-fibre posts; (3) laboratory evidence was contradictory and could not be used to inform practice reliably; (4) few clinical studies have been carried out though these have suggested fibre based posts may be clinically appropriate for restoration of the endodontically treated tooth; and (5) controlled prospective clinical trials evaluating fibre-based posts should be undertaken to inform use for clinical practice.

Fiber post systems, restoration, endodontic treated teeth

Presentation: Poster