A retrospective long term study of teeth restored with prefabricated carbon fiber reinforced epoxy resin posts.

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The Composipost endodontic post, made of stretched aligned carbon fibers embedded in an epoxy-resin matrix, has since the beginning of the nineties been widely used for the restoration of endodontically treated teeth. The aim of this retrospective study was to evaluate the treatment outcome of the Composipost system up to 7 years. In a study published 1998, 236 patients treated during 1992-93 by seven Swedish general dental private practitioners were studied. Five of the former seven private practitioners consented to participate in this follow up of that study. Thus the material was reduced to 138 patients. Thirty-nine of these were excluded due to insufficient data. For the remaining 99 patients, data were collected from dental records. All patients were offered a clinical examination but only 25 accepted. Data were collected from dental records for the remaining 74 patients. The mean follow up time was 6.7 years with a range from 1 month to 10 years (median 7.6 years, SD 2.5 years), (five teeth were extracted during the previous study). The outcome was considered successful if the post and core was in situ and showed no clinical or radiographic signs of technical failures. Sixty-four teeth (65%) restored with the Composipost system were successful after a mean time of 6.7 years. Thirty-two teeth were extracted due to fractures, periapical lesions and periodontitis. Dislodgment of post was observed in three cases. In conclusion, within the limitations of this study, after a mean time of 6.7 years, the Composipost restored teeth had shorter survival times than those of previously documented cast posts.

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