

Factors Affecting the Long-term Results of Endodontic Treatment

The influence of various factors that may affect the outcome of root canal therapy was evaluated in 356 patients 8 to 10 yr after the treatment. The results of treatment were directly dependent on the preoperative status of the pulp and periapical tissues. The rate of success for cases with vital or nonvital pulps but having no periapical radiolucency exceeded 96%, whereas only 86% of the cases with pulp necrosis and periapical radiolucency showed apical healing. The possibility of instrumenting the root canal to its full length and the level of root filling significantly affected the outcome of treatment. Of all of the periapical lesions present on previously root-filled teeth, only 62% healed after retreatment. The predictability from clinical and radiographic signs of the treatment-outcome in individual cases with preoperative periapical lesions cases was found to be low. Thus, factors which were not measured or identified may be critical to the outcome of endodontic treatment.