

An Epidemiologic Study of Tooth Retention After Nonsurgical
Endodontic Treatment in a Large Population in Taiwan

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Abstract

In this study, tooth retention and untoward events were assessed over a 5-year follow-up period for 1,557,547 teeth receiving nonsurgical root canal treatment (NSRCT) in Taiwan in 1998. We found that 1,446,199 (92.9%) of teeth receiving NSRCT were retained in the oral cavity 5 years after treatment and that a total of 111,348 (7.1%) of the studied teeth were extracted. Untoward events occurred in 159,680 (10.3%) teeth during the 5-year follow-up period. Of this small subpopulation, nonsurgical retreatment was performed for 50,587 teeth (31.7%), apical surgery was performed on 4,502 (2.8%) teeth, and extractions were performed on 104,591 (65.5%) teeth. Approximately 40% of the nonsurgical retreatments and 81% of the apical surgeries occurred in the first follow-up year. However, the yearly incidence of tooth extractions was nearly even within the 5-year study period. We conclude that NSRCT is a valuable dental procedure because of the high rate (92.9%) of tooth retention 5 years after NSRCTs in Taiwan.

Key words : Endodontic outcomes; General population; Tooth retention;
Untoward events