Long-term Survival of Endodontically Treated Teeth at a Public Dental Specialist Clinic

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**Aim**
- To evaluate the 10-year survival rate of root canal–treated teeth at this specialist clinic.
- To identify possible preoperative, intraoperative, or postoperative prognostic factors associated with the outcome survival.

**Materials & Methods**
- 420 teeth (330 patients) that were treated 10 years earlier in a specialty dental clinic were included in this study.
- Available potential preoperative, intraoperative, and postoperative prognostic factors were recorded.
- In the case where the tooth had been extracted, the date and, if possible, information about the reason for extraction were recorded.
- Statistical analyses were performed to determine factors contributing to the long-term survival of RCT teeth.

**Results**
- 81.5% of the teeth survived up to 10 years.
- The 10-yr. survival rate of teeth that received a crown after RCT was 91.3% vs 73% for teeth that did not receive a crown.
- Tooth loss was found to increase with age and was more common in male than female patients.
- 17.4% of the teeth were extracted due to:
  1. Root fracture (36%)
  2. Caries (22%)
  3. Periodontal pathology (15%)
  4. Elective in treatment planning (8%)
  5. Endodontic pathology (7%)
  6. Unknown reason (12%)

**Conclusion**
- 80% of the teeth treated by specialists survived at least for 10 years.
- Crown placement and patient’s age significantly improved the survival rate.
- Only 7% of extracted teeth were correlated to endodontic pathology.
- Caries and root fractures together contributed to 58% of the extracted cases.

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