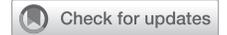


PERIODONTAL DISEASE

Extractions after periodontal treatment



BACKGROUND

There is a high prevalence of periodontitis in adults living in many developed countries. Because loss of teeth is a primary outcome of periodontal disease, treatment is focused on avoiding tooth loss over the long term. Low or moderate long-term extraction rates have been reported, but these rates can be affected adversely by higher age, smoking, or noncompliance with the recall program. A national insurance database was used to determine to what extent periodontal treatment avoids further tooth loss.

METHODS

The data were collected from the database of a major German national health insurance company. Researchers analyzed the data concerning the periodontal treatment as the intervention and compared them to the results for a control group of patients who had no periodontal treatment. The extraction incidences for both groups were calculated over a 10-year period, including 6 years before and 4 years after the treatment.

RESULTS

The treatment group included 415,718 patients who had periodontal treatment. A total of 263,376 patients were men and 152,342 were women. The control group consisted of 5,697,745 insured members who had not had periodontal treatment.

The cumulative survival rate 4 years after periodontal treatment was 63.8%. For the control group, the survival rate over this post-operative period was 72.5%. The difference between the 2 groups was significant.

The cumulative survival rates after periodontal treatment were between 52% and 81%, depending on the age group of the patients. The highest survival for the 4-years after treatment was found for the youngest patients. The lowest survival for this period was found for the oldest patients. Survival rates in the age groups between the 2 ranked in descending order relative to their age.

When extraction rates were compared over the 10-year period, the untreated patients' rates remained stable. For the treated patients, the extraction incidence rates rose shortly before periodontal treatment. After treatment, the extraction incidence was stable for 3.5 years and levels out about a third higher than before treatment.

A comparison of extraction rates between treated patients with and without regular annual dental check-ups found that rates were lower in patients without regular check-ups. The peak of extractions was before and around periodontal treatment. After the peak the incidence levels became similar between the 2 groups.

DISCUSSION

The outcome achieved in over 400,000 periodontal treatments was acceptable. In about two thirds of patients, extractions were avoided within 4 years after receiving periodontal treatment.

Clinical Significance

Extractions were uncommon in most patients who received periodontal treatment. This indicates that periodontal treatment is effective against periodontitis and allows patients to prevent further loss of teeth.

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