

CLINICAL STUDY

Rotadent[®] prevents decalcification during orthodontic treatment

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Reference: Boyd RL, Rose CM. Effect of rotary electric toothbrush versus manual toothbrush on decalcification during orthodontic treatment. Am J Orthod Dentofacial Orthop. 1994; 105(5): 450 – 456.

Abstract:

The purpose of this study was to determine whether daily use of a rotary electric toothbrush (Rotadent[®]) and a 0.05% sodium fluoride (NaF) rinse would significantly reduce decalcification when compared with manual toothbrushing only, or manual toothbrushing and daily use of a NaF rinse.

Methodology:

- Prospective, three-year clinical study; single blind evaluations on all facial surfaces of all study teeth
- 90 adolescent patients were selected who were not diagnosed with periodontitis nor had taken antibiotics during the six months before orthodontic treatment

Results:

- Rotadent group showed significantly less decalcification than the control and rinse groups

Conclusion:

The use of Rotadent in combination with a fluoride toothpaste and a daily 0.05% NaF rinse is significantly more effective than conventional toothbrushing with a fluoride toothpaste or conventional toothbrushing, fluoride toothpaste, and a daily NaF rinse in preventing decalcification in adolescents undergoing treatment with fixed

