

KODAK 9000 3D Extraoral Imaging System

Treatment Planning: The value of CBCT's ability to see in 3 dimensions and treatment plan accordingly...

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Case Overview

A 38-year-old caucasian male in good health presents with the chief complaint of soreness in the anterior maxilla. Endodontic history includes initial RCT over five years ago and retreatment approximately one year later. One year prior to his presenting in my office he underwent apicoectomy in an endodontic office.

Conventional periapical x-rays of the area showed periapical radiolucency around #8 (Figure A). Clinical testing revealed pain on palpation and slight pain to percussion. Periodontal probings were normal and there was no evidence of a sinus tract.



Figure A: 2D pre-operative radiograph.



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Dr. Curtis J. Brimley has practiced endodontics in the Salt Lake Valley since 2006. Dr. Brimley completed his undergraduate work at Brigham Young University and attended Temple Dental School in Philadelphia, Pennsylvania. After graduation from Temple, Dr. Brimley completed a residency at the University of Utah Medical Center in clinical and trauma dentistry, and received his credentials in Endodontics in 2006 from Mercy Hospital in Detroit, Michigan. Dr. Brimley founded Copper Creek Endodontics to provide the highest level of endodontic care for his patients. He is committed to providing exceptional treatment results for every patient he works with.





A small field CBCT scan was obtained of the area with the following results. The sagittal section shows that the post had clearly perforated the tooth through the lingual (Figure B). Patient reports that restoration was placed prior to the surgical treatment of the apex.



Figure B: Pre-operative sagittal view showing perforation of post.

Treatment Plan

Extraction and implant was recommended.

Testimonial

The CBCT's ability to see in three dimensions changed the entire treatment plan for this patient. Without the sagittal view showing the perforation it could have very easily been concluded that the problem in this case was a failing apicoectomy, resulting in the treatment option of performing the surgery again. The CBCT image clearly showed the problem. Had CBCT been used in previous examinations, this patient could have been spared the time, money and healing of undergoing the initial surgery.