## Diagnosis of Root Fracture with 70um Voxel MPR Images



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A 45-year-old male came for annual check-up.

He complained of mild discomfort on the maxillary central incisors but could not remember any previous traumatic history.

We took a periapical radiograph (Figure 1).

The periapical radiograph demonstrated radiolucent lines on the middle thirds of roots of both maxillary central incisors.

And then, CBCT Scan was performed to evaluate the details.

Figure 1. Periapical radiograph on maxillary anterior teeth. Radiolucent fracture lines are seen on the middle thirds of maxillary central incisors.

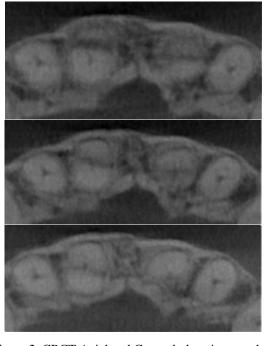




Figure 2. CBCT Axial and Coronal plane images showed the fracture lines.

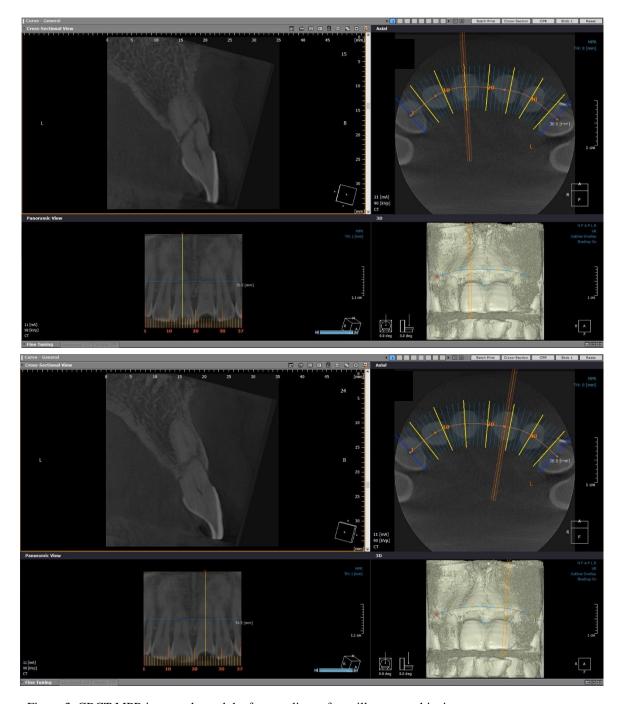


Figure 3. CBCT MPR images showed the fracture lines of maxillary central incisors. (RAYSCAN Alpha Plus, 70um Voxel resolution)

The CBCT MPR images clearly showed the posteroinferior oblique radiolucent line on the middle thirds of roots of maxillary central incisors. Step-like discrepancies caused by previous root fractures were observed on the roots of maxillary central incisors(Figure 2,3).

I explained the finding to him and advised to extract the teeth, and then consult to treat by implant surgery.

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## **Testimonial**

The RAYSCAN Alpha Plus provides 70um voxel images, which even can diagnose fracture lines more clearly.

User-friendly lighted guide system can decrease positioning failure, so patient exposure dose to take a CBCT scan can be reduced.

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For more information or inquiries, Please visit www.raymedical.com or contact your local representative.



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