

# Radiosurgery used to access internal radicular resorbtion

By Arthur Goldstein, DDS

## Case history

Mr. H presented in my office in an emergency situation with pain that had begun several days prior in tooth #27. The pain was no longer relieved by analgesics, and sensitivity had begun in the right sub mandibular area.

## Clinical examination

The #27 tooth had a class IV occlusal distal amalgam restoration of long date. There did not seem to be secondary caries. There was no apparent decay in the tooth, which was very sensitive to light percussion. There was also sensitivity in centric occlusion, which dissuaded the patient from closing his teeth together.

## Radiographic examination

Radiographic examination revealed a large area of internal resorbtion apical to the gingival crest (Fig. 1).

## Treatment

Mr. H. was given three grams of amoxicillin and 400 grams of Spifen and instructed to take two grams of amoxicillin six hours after the procedure.

A right mental foramen block local anesthetic of articaine Hcl with adrenaline was given. A full-thickness periodontal flap incision to bone with a Colorado electrode and Ellman Dento-Surg™ Radiosurgical unit set to "cut" (fully rectified filtered current) was performed to gain access to the area of internal resorbtion (Figs. 2, 3).

The area of resorbtion was curetted, followed by a root canal treatment with a gutta percha cone and estesone sealer (Fig. 4). The lamina dura at the apex of the root was not defined (Fig. 4).

A base of ZnPo4 cement was placed over the cone in the area of the resorbtion, followed by a well-polished macro composite filling. The periodontal flap was closed with Ethicon #5 non-resorbable sutures (Fig. 5). The #27 tooth is seen one-week post op in Fig. 6 and one-month post op in Fig. 7. Mr. H did not wish further treatment of the #27 tooth.



Fig. 1  
Radiograph shows large area of internal resorbtion apical to the gingival crest.

Photos by Dr. Arthur Goldstein



Figs. 2, 3  
Radiosurgery provides access to area of internal resorbtion.



Fig. 4  
Resorbtion is curetted, followed by root canal treatment with a gutta-percha cone and estesone sealer. Lamina dura at apex of the root is not defined.



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Fig. 5  
Periodontal flap is closed with Ethicon #5 non-resorbable sutures.



Fig. 6  
One week post-op.

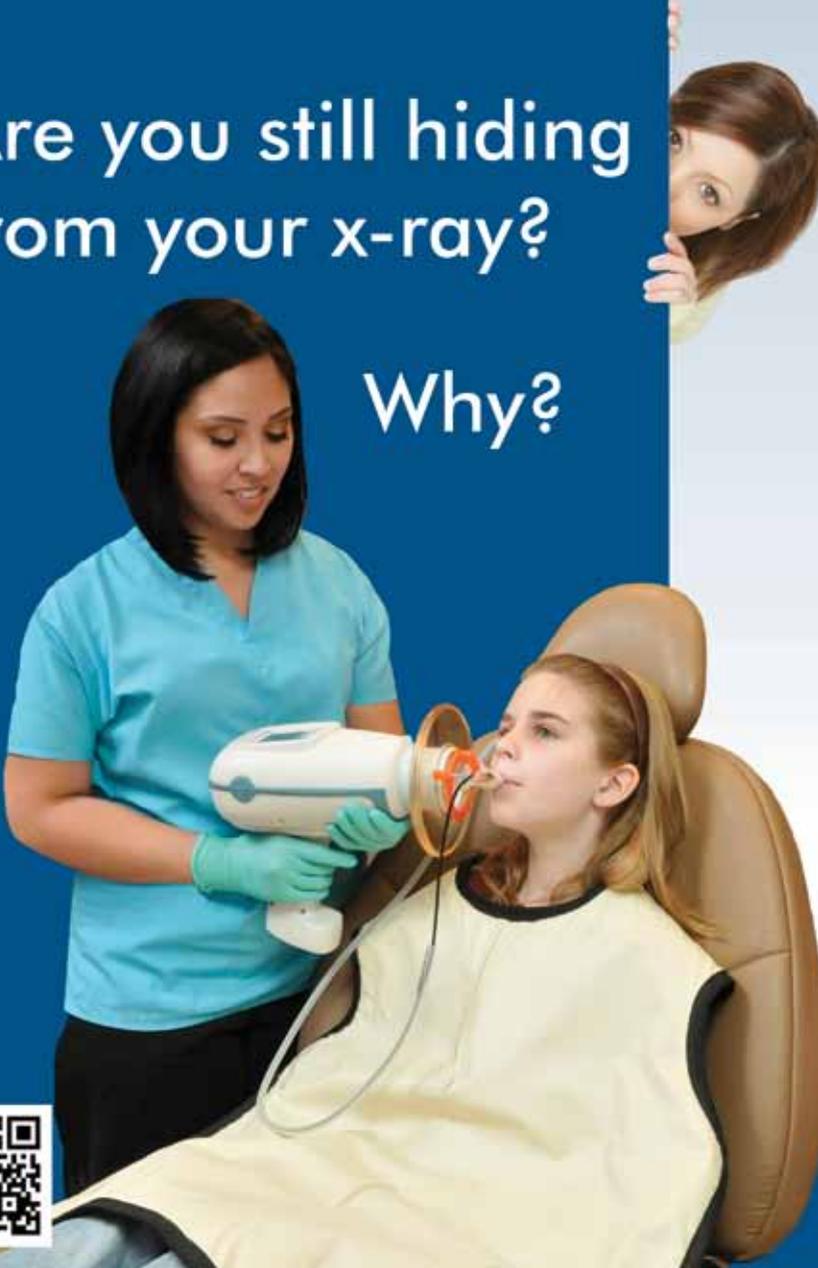


Fig. 7  
One month post-op.

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