Root Tips

from

Coastal Endodontics

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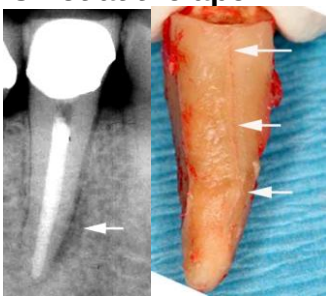
Diagnosis of Cracked Teeth

We see so many cracked teeth that I was beginning to wonder if there is something peculiar about the water here. However, in a recent issue of ***Dentistry Today***, an article entitled, "The Epidemic of Cracked and Fracturing Teeth" stated: ***"Teeth are fracturing today in record numbers. Cracked and fractured teeth are now the third leading cause of tooth loss in industrialized nations."*** So with regard to cracked teeth, our area is not unique.

Fractures in teeth often constitute a diagnostic challenge as they are frequently not visible, even with loupes. In some cases a crack only becomes detectable upon entering the pulp chamber, and even then, only with a microscope. Consequently, the diagnosis of a cracked tooth is sometimes based upon a pain to biting (especially on release), or the presence of an isolated deep periodontal pocket. Neither of these is a reliable indicator. ***Only 40% of teeth with a vertical root fracture have a periodontal pocket and only 60% have pain to biting.*** Sinus tracts, increased mobility and palpation sensitivity are also poor indicators.

Cracks are almost never visible on a radiograph. However, based on teeth treated in our office, the following clues may indicate that a fracture is present:

- **A periapical radiolucency (PARL) that is not at the apex**



- **A wide or "ditched" PDL space**

- **A PARL associated with a tooth that has a relatively small restoration, or none at all**

- **A PARL encompassing all roots**

The incidence of vertical root fractures is 2-3 times higher in 41-70 year olds, and the teeth most commonly fractured are lower molars and upper premolars.

The reason for the increase in cracked teeth is not clear, but it is generally attributed to the clenching and bruxism associated with our more stressful lifestyle. If you suspect a cracked tooth in one of your patients, please have them contact one of our offices to schedule a consultation.

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