



> DOGGONE ICR

DEC
2018

2018, year of the dog, is soon coming to an end and that may not bode well for our collective oral health. Unlike cats, dogs may be trying to save us from invasive cervical resorption (ICR).

ICR is a rare but an aggressive form of external resorption. Often asymptomatic, diagnosis is usually incidental. The pictures above demonstrate some common radiographic (non-carious lesions) and clinical features (pinkish colour of a clinical crown). The resorption of the 31 is so extensive the tooth is beyond redemption and orthodontic consultation to possibly close the space was recommended. The 31 also had a large cervical lesion. ICR can be transient but if it isn't and it is left untreated it will eventually result in amputation of the clinical crown. Early detection is paramount for success.

ICR is believed to be the result of overcompression of or damage to the periodontal ligament. Four of these stresses are listed below. However, over 15% of cases have no obvious predisposing factors. Early detection is difficult but central to successful treatment. The major risk factors for ICR are:

- Orthodontic treatment
- Trauma
- Bleaching of teeth
- Dentoalveolar surgery
- Feline fascination

Interestingly ICR is common in domestic, captive, and wild cats and is known as a feline odontoclastic resorptive lesion (FORL). In humans, multiple ICR (mICR) is present when more than three teeth have ICR. Both mICR (human) and FORL have unknown aetiologies and remarkably similar clinical, radiologic, and histopathologic features. Over the last decade veterinary studies are suggestive of a possible link between various feline viruses and FORL. A 2009 clinical report, in the Journal of Endodontics, found four people with mICR had direct or indirect contact with cats. Blood work revealed all four patients had antibodies for feline herpes virus type 1. Although this evidence is weak, at best, time wasted with cats may increase your chance of mICR or ICR.

Resorption can occur on any tooth and the pulp is surprisingly resistant to it. Pulpitis or pulp necrosis rarely develop prior to the emergence of a catastrophically large defect. Thus, unrestored asymptomatic teeth with no unusual clinical features could be harbouring a large ICR defect. This adds credence to the use of panoramic radiographs for new patient examinations, especially cat lovers.

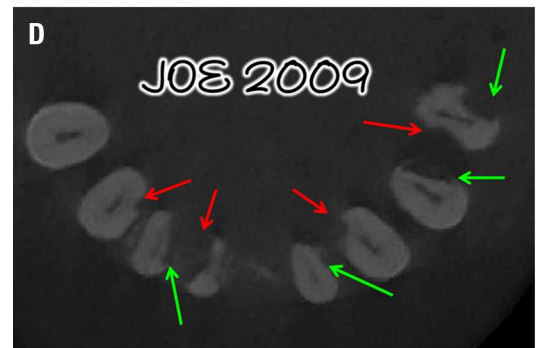
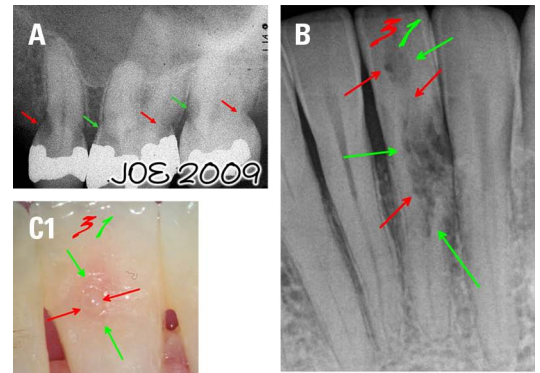
Once ICR is detected in one tooth, perform a thorough radiographic (PA's and bitewings) and clinical evaluation to rule out mICR. Resorptive defects are always larger than they appear on PA's and bitewings. Cone beam CT images allow a more accurate evaluation of the extent and location of a defect. Such information pre-operatively is necessary for reliable treatment outcomes.

Although concrete evidence remains elusive it is possible that the canines amongst us are weary of the threat to oral health cats pose. It is time to heed the wise snarls and barks of hounds and shun the ne'er-do-well felines. Over the Christmas holidays please reward the little four-legged guardians of your oral health with some long walks and sugar-free treats. Also, take comfort that the year of the tiger is not until 2022.

Regards,



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