RICHMOND
ENDODONTIC CENTRE

NOT SO NORMAL

DEC 2016

When is normal not normal? It is when a pulp is diagnosed as having asymptomatic irreversible pulpits (AIP). This pulp will respond normally to all vitality tests and the patient is often unaware of any issues associated with the tooth. Nevertheless, the pulp is deemed incapable of maintaining its health after a proposed restorative procedure. Thus, prophylactic endodontic treatment is necessary to allow proper restoration. Below is a list of clinical examples of AIP:

- Carious Defect: If excavation is expected to cause irreversible pulpitis either through indirect or direct exposure. For a proper diagnosis of AIP there can be no lingering sensitivity (.>5s) to cold even if it is placed directly in the defect. The first picture below is of a 47 with AIP. The recurrent caries under an old MO amalgam extends too close to the pulp. Pulp capping techniques and materials have improved immensely over the last few years but there are still cases where it is appropriate to recommend prophylactic endodontic treatment in conjunction with the restoration.
- Fracture I: If it is large enough that its removal and bracing with restorative materials will induce irreversible pulpitis. The second picture below is of a fracture on a 24 with AIP. There are no probing defects or mobility, the PDL is normal around the apices, and surprisingly there is no sensitivity to bite even with a tooth sleuth. The pulp was not expected to be able to endure removal of the fracture and bracing of the cusps with a crown or on-lay.
- Fracture II: A tooth that has lost a significant portion of its clinical structure due to trauma. This is a common occurrence for maxillary anteriors of hockey players who do not wear protective gear or are just unlucky.
- Thin Dentine Barrier: Although great strides have been made in bonded dentistry, it may still be necessary to consider a small tooth to have AIP when it requires extensive restorative work. Examples include: crowning of a mandibular anterior, peg lateral, or an immature tooth with a massive pulp chamber, or restoring teeth with extensive enamel defects.
- Dens Evaginatus: In some circumstances, such as its removal from the occlusal table.
- Root Amputation: For instance a 16 with a vital pulp but a catastrophic periodontal defect on the MB root. Amputation of the MB root is necessary to stabilise the periodontal condition and a prophylactic endodontic treatment is necessary pre-operatively.
- Past Experience: It may be prudent to consider a tooth to have AIP if it is scheduled for a crown or extensive restoration and the person has a history on similar teeth of requiring emergency endodontic treatment soon after cementation of a new crown.

The examples above demonstrate AIP can occur in a variety of circumstances. Perhaps this diagnosis is not cited as often as it should be. AIP is relevant to dentists as provides logical justification for orthograde endodontic treatment on a tooth with no symptoms and a pulp that responds normally to all vitality tests. Like all other pulpal diagnoses a thorough clinical and radiographic examination as well as pulpal and periradicular testing are necessary. To skip the proper examination is to deny a diagnosis and embrace a best guess and that can quickly lead to problems.

I hope you have enjoyed the newsletters this year and like you I am looking forward to some Christmas cheer.

Regards,

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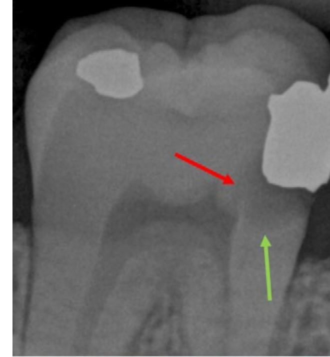

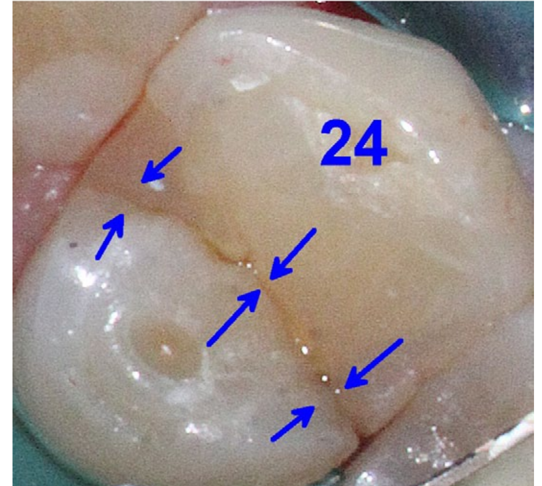

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Extended hours are also available

The Richmond Endodontic Centre Boardroom is open; it is available for meetings, lectures, and study clubs. Please come by and have a look at our new presentation centre!

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