RICHMOND
ENDODONTIC CENTRE

IT'S THE PIT'S

JAN 2017

Previously treated (PT) and previously initiated treatment (PIT) are diagnostic terms indicative of antecedent endodontic treatment. A PT tooth has obturation material in at least one canal. Be it short or long, replete with voids, or text-book perfect the radiographic aesthetics of the obturation matter not for diagnostic purposes. The most common obturation regimen is gutta percha (GP) with sealer. Other materials encountered include silver points, glass ionomer sealer systems, plastic/metal carrier systems, and a variety of red, white, or grey resin-like materials.
A PIT tooth has not had obturation material placed in a canal. In fact, only an attempt to access the pulp chamber is required. This diagnostic category also includes those that have had the pulp chamber accessed (i.e. pulpotomy), a canal or two accessed (i.e. partial pulpectomy), or all of the canals accessed and instrumented to length (i.e. pulpectomy). Often, but not always, the canals are medicated. Diapex is a radiopaque medicament that mimics the appearance of GP and sealer on PA's and may lead to a pre-op misdiagnosis of PT. Also large restorations and opaque crowns can prevent an accurate pre-op diagnosis of PT or PIT. An incorrect pre-op diagnosis is problematic as there are complications associated with PIT and PT teeth:

- Iatrogenic issues related to chamber access: perforation, excess removal of coronal tooth structure, loosening of existing crown, bridge, or filling, mal-alignment of access, and inadvertent blockage of canal orifices with débris or materials
- Iatrogenic issues related to previous access to a canal: perforation, strip perforation, transportation of original canal path, overzealous removal of root dentine, blockage of canal with either an instrument fragment, dentine, or some material
- Missed canals
- Plastic/metal carrier systems, glass ionomer sealer systems, resins, and other unique obturation materials can be difficult or impossible to remove, prevent patency being achieved, and increase the chance of further iatrogenic issues
- Posts and pins can be difficult to remove, block canals, or be so problematic as to lessen the prognosis for long-term sustainability of a tooth

As such there are unique codes and fees for PIT and PT teeth. The PA above demonstrates two PIT teeth and one PT tooth:

- 25: PIT with calcium hydroxide where the dentist had searched for the canal
- 26: PT with untreated MB canals and extrusion of obturation material through a perforation on the chamber floor
- 27: Likely PIT as it appears the chamber was previously accessed, a GP cone traces the sinus tract close to the palatal apex

The bitewing above highlights how a mal-aligned access can complicate subsequent treatment. The dentist thought he had discovered the DB canal and searched mesially for an MB orifice. The opposite was true though, he had found the MB canal and the DB orifice was buried under the DOBL restoration.
PIT and PT teeth have an increased chance of iatrogenic issues that can stand in the way of a successful endodontic outcome. Often these issues are not obvious pre-operatively. Be diligent with your pre-op examination and wary of the potential pitfalls of treating PIT and PT teeth. Proceed cautiously and let's hope for a less eventful 2017!

Regards,

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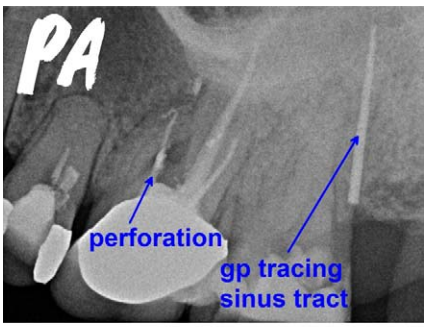

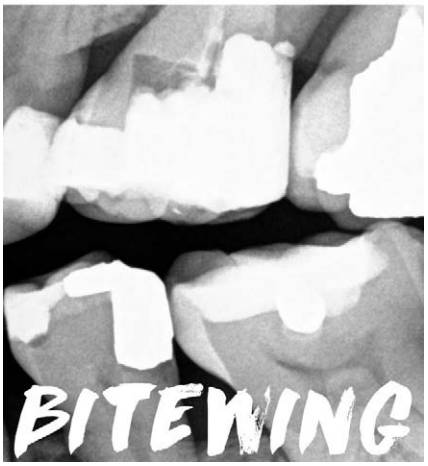

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