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ENDODONTIC CENTRE

PERF–ECT

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A strip perforation (perf) is typically an iatrogenic defect secondary to overzealous instrumentation or post preparation. The thin concave furcal walls of mandibular molars are particularly prone zones for strip perfs. If left untreated bacterial contamination will occur and lead to periradicular tissue injury, inflammation, bone resorption, periodontal fibre destruction, epithelium proliferation, and an eventual periodontal pocket. Thus, time is of the essence for successful treatment of perf sites. Prior to the development of bioceramic materials a strip perf was met with professional reproof and forecasts of the inevitable extraction. Such need not be the case anymore.

A 34 year-old CDA had a suspected strip perf on the mesial root of her **46**. The initial treatment was completed six months previously in Eastern Europe. The **46** never felt right afterwards; it eventually became too sore to endure. Unfortunately, a narrow 5mm probing defect was discovered on the distal aspect of the mesial root. Pre-operatively, I was not sanguine about the prospect of saving the **46** given the narrow probing defect and six month hiatus. The distal root has a long carbon fibre post with a normal PDL. Thus, we decided to restrict our treatment to the mesial roots and only tackle the distal if a relief of symptoms proved evasive.

Carbon fibre posts were also present in both mesial canals. Furcal to each were strip perfs (1x2mm). Copious irrigation with NaOCl provided adequate haeme control. The two mesial canals were retreated and medicated with Diapex. MTA was placed in the two perf sites. The Diapex served as a barrier preventing MTA from migrating apically and conceivably becoming an impediment to patency.

Thirty days later the **46** was asymptomatic, functional, and the 5mm probing defect was not obvious (I did not probe too vigorously). The MTA was set and the perf sites appeared to be well sealed. The canals apical to the MTA were obturated with warm vertical compaction whilst composite was bonded in the middle and coronal thirds of the canals. The patient was advised to forgo a crown for at least six months. Instead the CDA returned four years later for an emergency appointment; her **36** and **37** were in need of retreatment. Fortunately no strip perfs are suspected in either the **36** or **37**. The four year recall exam confirmed the **46** remains asymptomatic and functional with no probing defects. It is reasonable to consider our treatment a success and I advised the patient to proceed with a cuspal coverage restoration tout de suite.

It is possible the symptoms were related to the underprepared mesial canals and not the perfs per se. However, the narrow probing defect was secondary to the perfs and its resolution is central to the excellent long-term prognosis for this tooth. We all strive to be adroit at avoiding strip perfs but fear not with modern endodontic materials and techniques extraction is not inevitable.

Regards,

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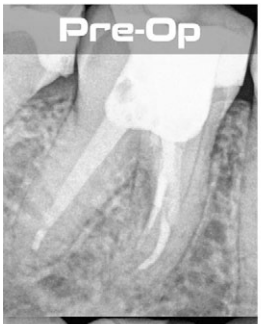

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Extended hours are also available

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