



WESTERN MONTANA ENDODONTICS
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The Endo Files

In an effort to better support our referral partners, I am starting a series of clinical updates on modern endodontics. These updates are designed to be quick reads that offer actionable value for your practice. My goal is to share practical endodontic insights that you can immediately apply to your clinical practice—whether you're performing the procedures yourself, treatment planning complex cases, or discussing specialized options with your patients. These aren't meant to be exhaustive academic reviews, but rather concise 'clinical pearls' to help you navigate the ever-evolving world of endodontics.

The topic of our first bulletin is management of large lucencies with a technique called decompression. Most lucencies, even large ones, can be managed through conventional non surgical and surgical endodontic treatment. Some select cases would benefit from decompression. Surgical management of large lucencies can cause collateral damage to vital structures and adjacent teeth. For example, if a large lucency encompasses the apices of multiple teeth that are not endodontically infected, these adjacent teeth can become devitalized during surgical curettage. If a lucency has eroded the nasal floor (see Figure 1C) or the inferior alveolar canal, surgical management of the area is more challenging and has more potential intra- and post-operative complications.

Decompression is a method to shrink the size of the lucency with a long-term drain; this is a minor surgical procedure that is more conservative and less invasive than a traditional flap and enucleation. Of course, this procedure is usually completed concurrently with non surgical endodontic treatment. With large lucencies and/or lucencies that heal unpredictably, we often apply calcium hydroxide in the root canal spaces multiple times. Decompression can be performed concurrently during the non-surgical calcium hydroxide placement.

An incision is made in the gingiva to access the defect, followed by placement of a custom drain (see Figure 1D). The drain can be fabricated from an impression material tip (Figure 1D) or a nasopharyngeal tube; both of these have a flange, preventing the drain from sinking completely into the defect. The drain is further customized to allow it to be sutured into place. The drain is placed into the area of the lucency. Usually, the buccal plate is already perforated, allowing easy placement. In some cases the buccal plate is still intact, and a small trephination can be completed with a surgical round bur to allow placement of the drain into the defect. To secure the drain in place, we recommend using a monofilament suture to prevent inflammation; the drain is left in place for about four weeks. The patient is given instructions about irrigating through the drain twice daily with chlorhexidine with a monoject syringe with a tip small enough to fit into the drain. We prefer weekly check-ins with the patient to ensure they are irrigating properly and the drain remains patent.

Sometimes a decompression procedure allows for clearing of the lucency without the need for further surgical intervention (Figure 1E and 1F). However, at a minimum, the procedure usually shrinks the lucency to the point that there will be less collateral damage to adjacent teeth and vital structures. Shrinking large lucencies with this technique can also aid in implant treatment planning to re-establish an alveolar ridge prior to final implant placement, especially if the offending teeth have a compromised restorative prognosis.

As always, feel free to contact me if you have any questions about decompression or your patients. If you have a topic that you would like covered in one of these bulletins, let me know. My cell number is 7194828084. Thank you for your continued trust in us with your patients' endodontic needs.

Respectfully,
J.T. Crepps, DDS, MS

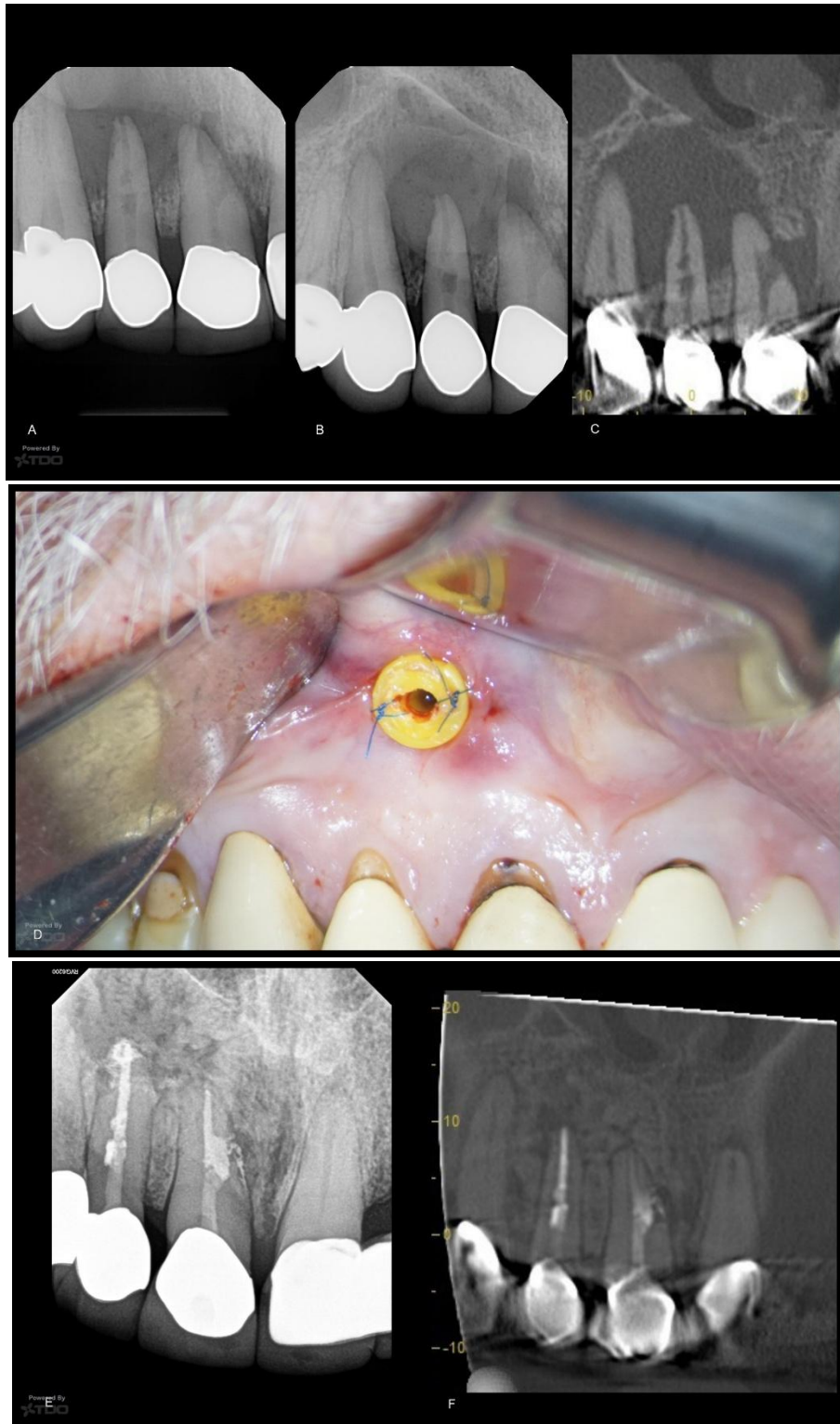


Figure 1: (A, B) Lucency encompassing the apices of #7 and 8. (C) Lucency slightly perforates nasal floor. #7 has internal inflammatory resorption, and #8 has external inflammatory resorption. (D) Placement of drain fabricated from an impression material tip, which is secured with monofilament sutures. (E, F) Recall images from three years after treatment was completed.