

A 33-year-old construction worker self-referred himself for a second opinion. Six months previously he fell over forty feet resulting in severe injuries that kept him hospitalised for several weeks. Near the end of his stay, a fascial space infection developed in the right cheek. Since then, he endured a cacophony of IV and oral antibiotics to no avail. With a no discernable diagnosis and a recalcitrant, but constrained, infection a rebukable extra-oral incision was performed. An anaesthetic indentation will serve as a permanent reminder of this contemptuous misadventure.

An abundantly phlegmatic surgeon advised an exploratory surgery will elucidate all that concerns this indomitable infection. The main caveat of such a preeminent event was an almost certain likelihood of permanent nerve damage. Numerous times, over the preceding months, the patient had opined a dental evaluation be considered. As a last resort prior surgery, an MD reluctantly conceded a dental exam could be entertained for the sake of completeness.

The clinical examination revealed a taught, tripwire-like, line of tissue extending from the attached gingiva buccal to 15 towards the extra-oral sinus tract. The fractured palatal cusp was likely an unrecognised casualty of the 40 ft. fall. There were no probing defects and the 15 was the only tooth in quadrant one that did not respond to cold or EPT. Its diagnosis was Necrotic Pulp with Chronic Apical Abscess (extra-oral drainage) and historical fascial space involvement. Expedient access, irrigation, and medication of the canal was followed by drainage of the extra-oral sinus tract via compression.

Antibiotics were unnecessary as there were no systemic signs of infection, cellulitis, if present, was not expanding rapidly, the bloke was immunocompetent, and prompt endodontic treatment was imminent. Dentists, unlike physicians, should rarely prescribe antibiotics as a first-line of treatment for an infection (AAE Guideline, 2019). There is no consequential evidence, in the literature, substantiating the use of antibiotics for periapical abscesses, irreversible pulpitis, or symptomatic apical periodontitis. A timely pulpectomy, incision, or local débridement is effective. With the exception for cases of irreversible pulpitis, if such treatment cannot be provided, the same day, then antibiotics may be considered to merely 'buy time'.

If I were to treat this tooth today, I would incise intra-orally. This will permit more reliable drainage of the toxic purulent elements, promote robust perfusion of blood containing defensive elements, and increase oxygenation to the infected site.

Compared to biomechanical preparation alone, intracanal medication will increase the totality of killed microorganisms. The effectiveness of the medication extends beyond the canal lumen into the dentinal tubules and apical resorptive defects. The calcium hydroxide also restores the physiological pH of dentine which was lowered by the microbial activity. Extrusion of the medicament will effectively 'flush out' bacteria, debris, and tissue that otherwise may remain in the canal despite vigorous biomechanical efforts and void-free obturation.

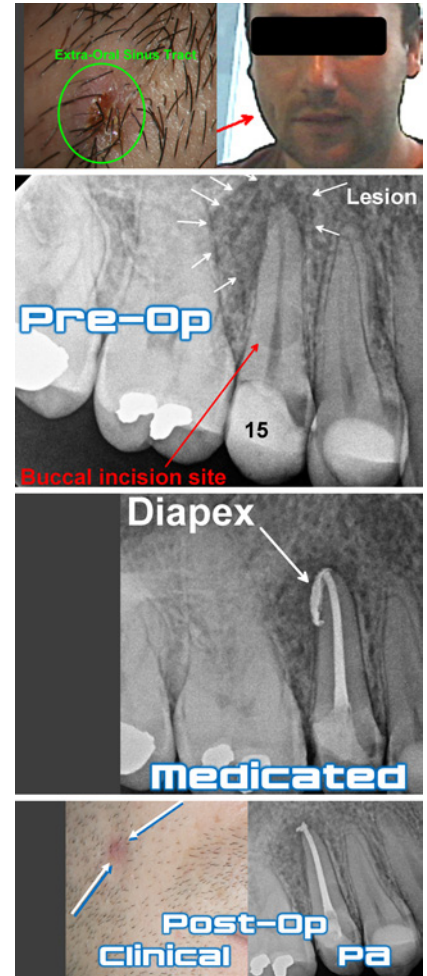
Rather than waiting six months for the tankards of antibiotics and extra-oral incision to prove themselves to be unregenerate missteps the physicians should have considered a possible odontogenic source. However, dentists should admonish the urge to be smug as Marra et al'16 found that from 1996 to 2013 the number of antibiotic prescriptions by physicians in British Columbia fell whilst those of dentists increased 62.2%.

Antibiotics in dentistry, more so than any other health field, can rarely be relied upon to eliminate an infection. To avoid calamitous outcomes, defensible pre-operative pulp and periradicular diagnoses are imperative. When at first you do not succeed do not try, try again but seek a sound diagnosis. If not, it may not just be you that does not look good in the end.

Regards,



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**I am dedicating the 2020 Ride to my grandmother Margaret Fransen who was taken by cancer when my dad was merely a lad.** Cancer stole my dad's mum from him but I will honour the positive impact she made on my dad and his two sisters.

Please consider donating to my 2020 Ride to Conquer Cancer.

