





PA radiograph of patient experiencing facial pain an and persistent sinus symptoms on the upper left.



CBCT showed persistent lesion on #15 rising into the sinus.



Missed MB2 canal was determined as the source of the infection and #15 was retreated nonsurgically, resolving symptoms.



Happy New Year my colleagues!

I have had the chance to meet many of you but if I have not introduced myself yet, my name is Nick Leon-Guerrero and I joined Dominion Endodontics as their new associate endodontist last year. This newsletter will be the first in hopefully a quarterly series in which we discuss some cases and information within the scope of endodontics that can help us as dental professionals better serve our patients. As we enter 2020, I thought it would be a good idea to talk about something that dentists may encounter this cold and flu season: maxillary sinusitis.

Patients with maxillary sinusitis typically experience symptoms like congestion, rhinorrhea, retrorhinorrhea, foul odor, and even facial pain. Although many of our patients will initially believe these symptoms to be due to a cold or allergy, studies indicate that more than 40% of maxillary sinusitis cases are odontogenic. Shockingly, when the sinus symptoms are unilateral, an endodontic source was found to be the problem over 70% of the time! The tough part for our patients is that odontogenic causes of sinus infections are often overlooked by ENT and medical radiologists. Utilizing our unique diagnostic skills as dental professionals is one way we can help our patients suffering from this affliction where others may fall short.

Patients with Maxillary Sinusitis of endodontic origin rarely experience typical endodontic symptoms. In these cases, a periapical abscess is essentially draining into the sinus, relieving pressure, so there are rarely percussion symptoms. Moreover, swelling or intraoral sinus tracts are infrequent in these cases for the same reason. Pain to cold or hot is also absent because the offending tooth is either necrotic or has a failing root canal. If a patient in our chair reports recurrent sinus symptoms, particularly if they present unilaterally, we should make them aware that there may be a dental cause.

We as dental professionals are best trained to aid in the diagnosis and treatment of these cases of sinusitis of dental origin. In addition to pulp testing for necrosis, CBCT is critical in the diagnosis of these lesions and locating the offending tooth. Using a CBCT, we can detect localized areas of sinus inflammation as well as periapical lesions which may be contributing to a sinusitis. Treatment of maxillary sinusitis of endodontic origin is targeted at removing the source of the infection. Antibiotic therapy may be effective for pain relief in the short term, but is ineffective as a definitive solution because it only addresses the symptoms and not the underlying cause. Ultimately, the offending tooth will require root canal therapy or extraction for the symptoms to fully resolve.

I hope you have found this newsletter helpful and with this information be better able to serve our shared patients. If you would like more information on maxillary sinusitis, or like to have a conversation about any other topic in endodontics, feel free to reach me by phone at Dominion Endodontics or email me at NickLGDDS@Gmail.com

Best of luck this upcoming year!

-Nick Leon-Guerrero DDS