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# A Case of a Draining Oral Fistula Misdiagnosed as a Dermatologic Infection

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## **ABSTRACT**

This case report describes an example of a dental infection of endodontic origin that has manifested extraorally as a draining sinus. This is a commonly missed diagnosis in a non-dental healthcare facility especially if the tooth is asymptomatic and the infection has been chronic in nature.

## **Case Report**

A 23-year-old female presented to the office for a routine 'first dental home' checkup of her 1-year-old child. While conducting a knee-to-knee exam on the child, it was noticed that patient's mother had a large crusting ulcerative lesion on her left cheek close to the inferior border of the mandible. On interview, it was discovered that lesion was diagnosed by a physician and a dermatologist as a facial abscess and was attempted to remove surgically twice but kept recurring [1]. The patient was scheduled for a third surgical excision procedure. On further routine questioning, the patient mentioned occasional tooth pain on the lower left side. The patient was recommended a routine dental check up to eliminate an odontogenic origin of the extraoral abscess. Medical history was noncontributory and periapical radiographs were taken. Clinical, radiographic and visual examination revealed large periapical lesion with Grade 2-3 mobility on #19 [2]. There was a large carious lesion on the tooth with deep pocketing. The tooth did not respond to thermal stimuli (Control teeth: 18, 20, 21, 14,15). Periodontal examination revealed gingival inflammation along with subgingival calculus, loss of clinical

attachment and bleeding on probing. A diagnosis of pulpal necrosis with chronic apical periodontitis was made on #19 leading to an extraoral draining sinus [3]. Periodontal diagnosis was established as Chronic generalized moderate periodontitis. Extraction of the tooth along with scaling and root planning was recommended to immediately control the infection followed by a comprehensive examination to improve the oral health status of the patient [4]. Topical anesthetic was placed and 2 carpules Lidocaine HCL, 2% with Epinephrine 1:100,000, (Exp.2020-05, Lot #D02484C) administered by infiltration and left inferior alveolar nerve plus long buccal nerve block. (Figure 1).

A mucoperiosteal flap was reflected, the tooth was luxated and atraumatically delivered. The socket was curetted of all granulation tissue [5]. There was a significant amount of granulation tissue that needed excision of the adhesions to adequately clean the socket. This finding is a common occurrence in cases of chronic infections in the oral cavity. The patient was prescribed antibiotics (Amoxicillin 500 mg tid for 10 days, Metronidazole 500 mg tid for 7 days) and a follow up was scheduled after 7 days. On the follow up appointment,

the area showed considerable improvement in healing. There was no crusting or ulceration and the skin looked infection free and healthy [6]. A follow up with the physician confirmed healing of the lesion

as reported by the patient with the need of esthetic surgery to treat the keloid that had formed due to the chronic nature of the infection (Figure 2).

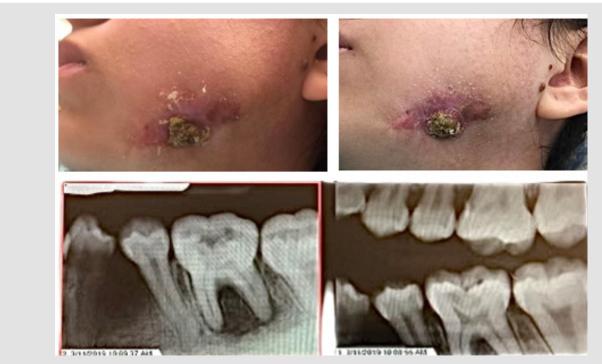


Figure 1



Figure 2

#### Discussion

Posterior teeth, especially in the mandible are the most common sites of occurrence of these cases. The lesion tends to follow the path of least resistance where the bone is most expansile [7]. In cases of non-restorability of the tooth due to mobility or extensive loss of tooth structure, extraction followed by adequate replacement by implant, bridge or a partial should be considered. Bone grafting procedures should be avoided on the day of extraction. Purulence at the socket causes the environment to be highly acidic which can lead to rejection of the graft material [8]. Early detection of these lesions, especially by non-dental health professionals, can help alleviate a lot of complications by aiding in proper diagnosis and referral to dentists.

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