## Odontogenic cutaneous fistula of the face

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n otherwise healthy 61-year-old woman was referred to us by her dermatologist with a 6-month history of an enlarging nodule of the left cheek. The patient was aware of slight mobility of the left posterior maxillary teeth. She had no alcohol or drug problems and was not homeless. Her oral health knowledge and attitude were good. Extraoral examination showed an erythematous, crusted nodule measuring about 50 mm with pus discharge on the left cheek (Figure 1A). Intraoral examination showed swelling of the left posterior maxillary buccal gingiva and hypermobility of the left maxillary teeth without pain (Figure 1B). Computed tomography showed radiolucency in the periapex and perforation of the buccal cortical bone of the left maxillary teeth with surrounding soft-tissue edema that was consistent with the site of the cutaneous nodule (Appendix 1, available at www.cmaj. ca/lookup/suppl/doi:10.1503/cmaj.190674/-/DC1). Blood examination did not show any major abnormalities. Odontogenic cutaneous fistula was diagnosed. Cefdinir was administered for 12 days, and the patient underwent extraction of the infected teeth. Nine days later, the nodule was resolved, with no complications.

Odontogenic cutaneous fistula is a rare extraoral path of chronic dental infection caused by an untreated tooth. <sup>1-3</sup> It is more common among middle-aged and older adults and women. <sup>3</sup> Most cases occur as a nodule in the mandibular angle or chin. <sup>3</sup> Only about 50% of patients present with a history of toothache. <sup>1</sup> The lesion is often misdiagnosed as being of nonodontogenic origin, which results in inappropriate treatment, such as a prolonged course of antibiotics and repeated surgical treatment. <sup>1</sup> Identifying a heavily decayed, discoloured or mobile tooth leads to suspicion of odontogenic origin. Radiologic examination shows a radiolucent lesion in the periapex of the affected tooth. <sup>1</sup> The differential diagnosis includes pyogenic granuloma, tuberculous infection, salivary gland fistula, suppurative lymphadenitis and carcinoma. <sup>1,2,4</sup> Treatment of the infected tooth leads to resolution within 2 weeks. <sup>1</sup>

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Figure 1: (A) Erythematous, crusted cutaneous nodule measuring about 50 mm on the left cheek of a 61-year-old woman with an odontogenic cutaneous fistula. (B) Swelling and redness of the left posterior maxillary buccal gingiva (arrow).

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The authors have obtained patient consent.

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