

## Letter to Editor

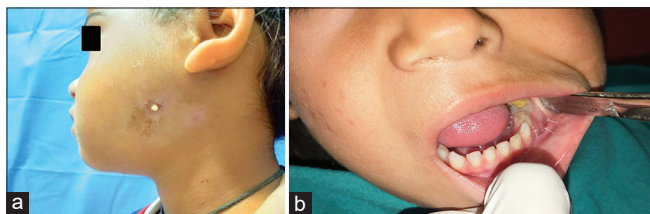
# Unusual presentation of an extraoral and multiple intraoral sinus tracts in a 6-year-old pediatric patient

Dear Editor,

We would like to present this brief report highlighting the unusual and simultaneous presentation of an extraoral and multiple intraoral pus draining sinus tracts of dental origin in a pediatric patient. A 6-year-old female was referred to the department of dentistry with chief complaint of pus discharge from the left side of the face for the past 2 months. The patient in her previous physician visits was advised extensive investigations, prescribed multiple antibiotics and medicated dressings and underwent incision and drainage of the cutaneous lesion under GA, with no improvements in symptoms. The patient gradually developed a swelling in the same region with intermittent low-grade fever since 1 month.

Extraorally, the patient had facial asymmetry with a diffuse swelling over the left mandibular angle and submandibular region. The swelling was tender on palpation, associated with an extraoral sinus on left cheek with granulation tissue, spontaneous pus discharge, and crusting of the surrounding skin [Figure 1a]. Intra oral examination revealed mandibular deviation with a decreased mouth opening of 15 mm. Multiple intra oral pus draining sinuses were present on the gingiva associated with a discolored left primary molar [Figure 1b]. Panoramic radiograph revealed dental caries of left primary molar associated with resorption of left inferior border of mandible [Figure 2]. Considering the clinical presentation, age of the patient, chronicity of the lesion and limited mouth opening, extraction of the involved teeth with excision of the extra oral sinus tract was planned under GA.

Intraoral drainage is more common than extra oral drainage with the mandibular teeth being a more common source than the maxillary teeth.<sup>[1,2]</sup> Extra oral sinus tracts can be non-odontogenic



**Figure 1:** 1a: Extra oral sinus with spontaneous pus discharge. 1b: Multiple draining intra oral sinus tracts associated with discolored left primary molar

and odontogenic in origin and often present a diagnostic challenge. Only 50% of the patients with facial cutaneous sinus tracts have tooth-related symptoms because of which, patients are often attended to by health care professionals other than dentists.<sup>[2]</sup> The distance of the extraoral sinus from the primary odontogenic etiology further confuses the clinical picture. The differential diagnosis includes osteomyelitis, furuncle, congenital fistula, salivary gland fistula, deep mycotic infection, granulomatous disorder, pustule, myositis, foreign body lesion, infected cyst, suppurative lymphadenitis, and neoplasm.<sup>[1-3]</sup>

The unusual clinical presentation seen with respect to the primary molars in the present case is attributed to the delay in diagnosis due to asymptomatic teeth and multiple antibiotic therapies which blocked the drainage partially through incomplete healing.<sup>[1]</sup> It has been reported that permanent tooth buds in the line of infection may be expelled as foreign bodies through the extra oral sinus tract in which case the parent may complain of loss of a tooth through the extra oral sinus tract.<sup>[4]</sup> Inappropriate management like biopsy, curettage, antibiotic therapy, surgical excision of the cutaneous lesion, and radiotherapy may provide temporary relief but are inevitably followed by recurrence and compromised aesthetics due to skin scarring.<sup>[2]</sup> Primary health care physicians encountering such cases should therefore take a history of trauma to teeth, toothache before development of sinus and examine the oral cavity for presence of heavily discolored or treated teeth; as they are the patients first point of contact in the peripheral areas. This article emphasizes on considering an odontogenic source of infection and timely referral to a dental surgeon in such clinical presentations to avoid misdiagnosis. This will ensure prompt dental treatment aimed towards eliminating the source of infection and good prognosis while avoiding development of acute sequelae and subsequent hospital admission. Patient consent was obtained for publication in scientific journals.

### Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient (s) has/have



**Figure 2:** Panorex showing carious left primary molar associated with resorption of left inferior border of mandible

#### Letter to Editor

given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

#### Conflicts of interest

There are no conflicts of interest.

## Tulika Wakhloo, Gosla S. Reddy, Ashi Chug

*Department of Dentistry, All India Institute of Medical Sciences (AIIMS), Rishikesh, Uttarakhand, India*

**Address for correspondence:** Dr. Tulika Wakhloo,  
Department of Dentistry, All India Institute of Medical  
Sciences (AIIMS), Rishikesh, Uttarakhand, India.  
E-mail: [tulikawakhloo@gmail.com](mailto:tulikawakhloo@gmail.com)

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