

cutis[®] Photo Quiz

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A 35-year-old man complains of an intermittently draining area along the jawline.

What is your diagnosis?

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The Diagnosis: Odontogenic Sinus



Chronic dental sinuses are readily diagnosed if the practitioner is familiar with the characteristic presentation. Lesions often are nonpainful, and inspection of the mouth may not reveal an obvious dental abnormality.¹ X-rays may be negative, but Panorex films usually will show an abscess, most often around the apex of the infected tooth.¹ Dental extraction or surgical management of the abscess will lead to prompt resolution. Topical measures may lead to transient benefit, but recurrence will invariably occur.² Requesting a thorough dental examination and performing the appropriate Panorex views will facilitate rapid diagnosis and treatment.

Odontogenic cutaneous draining sinus tracts often are diagnosed incorrectly. Buccinator and mylohyoid muscle attachments relative to a periapical dental abscess determine whether tracts will erupt intraorally or cutaneously.² Degeneration of the pulp and periodontal membrane of a tooth precipitated by trauma or disease may lead to a slowly progressive destruction of alveolar bone.^{3,4} When the apices of teeth are above maxillary muscle attachments, cutaneous sinuses may occur. About 80% of cutaneous sinus tracts are associated with mandibular teeth, and about half of these tracts involve the anterior mandibular teeth.

Extraoral drainage usually is adjacent to the causative tooth. Infection of mandibular incisors

and cuspids give rise to sinuses in the chin and submental area. This is a common occurrence in children and adolescents because the apices of their developing teeth often are superior to the maxillary attachment of the buccinator muscle.

The average age of onset of odontogenic sinus is 30 years. The differential diagnosis includes inflamed epidermal inclusion cyst, trauma, osteomyelitis, bronchial cleft, and thyroglossal duct cyst. Only half of patients with odontogenic sinus recall having a toothache, which makes diagnosis more difficult.

Treatment typically involves extraction of the affected tooth. Conservative nonsurgical root canal therapy often is successful and should be considered before performing an extraction.

REFERENCES

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