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Lingual Abscess in an Immunocompetent Patient: A Case Report

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Abstract: ***TA lingual abscess is an extremely rare infection of the base of the tongue or mouth that can be fatal. As a result, it's critical to detect tongue infections as soon as possible and handle them urgently, particularly in the event of dyspnea and dysphagia. Specifically, abscesses surrounding the tongue's root may be fatal if untreated. These lesions should be opened and drained once diagnosed. A case of a 35 year old patient is being reported here emphasizing on the urgency to treat tongue abscess. Because of the tongue's extensive circulatory system, lymphatic drainage, and immunologic properties of saliva, tongue abscesses are relatively rare. Maintaining the airway, making an incision, and draining the abscess are all important steps in a thorough diagnosis and effective treatment of tongue abscess. Both gram-positive and gram-negative anaerobes should be treated with antibiotics.***

Keywords: Lingual abscess , infection, ENT disease, tongue

1. Introduction

A lingual abscess is an extremely rare infection of the base of the tongue or mouth that can be fatal. An extremely uncommon condition called a tongue abscess has the potential to impair breathing.The tongue's robust keratinized epithelium, its rich vasculature, the density of its muscle compartments, and saliva's bactericidal qualities all work together to prevent infection.[1, 2] Tongue infections are more likely in people with compromised immune systems, foreign bodies, and breached surface barriers.[3]As a result, it's critical to detect tongue infections as soon as possible and handle them urgently, particularly in the event of dyspnea and dysphagia. Specifically, abscesses surrounding the tongue's root may be fatal if untreated.[4]These lesions should be opened and drained once diagnosed. A case of a 35 year old patient is being reported here emphasizing on the urgency to treat tongue abscess.

2. Case Report

A 35-year-old patient complained of intense tongue pain and swelling that persisted for five days. She drooled saliva and experienced pain when swallowing as a result of this. She also had trouble opening her mouth. She also had a fever of high grade. She did not smoke, have any recent dental or oral procedures, have any history of trauma to her tongue, and no history of chronic illnesses such as diabetes mellitus, heart disease, or hypertension. Prior to her current complaint, she had experienced excruciating, ongoing dental pain for the previous six months. Her dental hygiene was subpar. Upon physical examination, she appeared extremely sick, with a large swelling of the tongue on the right anterolateral region, which fluctuated when palpated, and an erythematous border (Figure 1).

Figure 1: Clinical photograph showing lingual abscess before and after incision and drainage of lingual abscess on right side in the anterolateral part of tongue.

Multiple teeth in the mandibular and maxillary regions are decaying. Regarding the remaining systems, no relevant findings were found. Following informed consent, a local anesthetic was used for the incision and drainage, and roughly 20 milliliters of viscous pus were removed. Two percent hydrogen peroxide and regular saline were used to wash the pocket. After two days on ceftriaxone 1 gm iv twice daily (BID) and metronidazole 500 mg iv three times per day (TID), the patient was transferred to the surgical ward with stable vital signs. After two days in the hospital, she was released with improvement and was given five days of augmentin 625 mg PO TID.

3. Discussion

Tongue abscesses are extremely rare and typically affect either immunocompromised patients or healthy individuals who have had their tongues pierced.[3]The anterior two thirds of the tongue are the site of the majority of unilateral tongue abscesses.[5]This patient, whose location is in the right anterolateral region of the tongue, is similarly affected. Common symptoms of tongue abscesses include speech impairment, odynophagia, dysphagia, and a painful swelling that causes the tongue to protrude.[6, 7]The patient at hand also had excruciating tongue swelling and pain. She also had difficulty opening her mouth, dribbling saliva, and pain when swallowing. She also had a fever of high grade. An ongoing dental hygiene issue could be the cause of the abscess. If the lesion is not properly treated, an abscess relapse is likely to occur even though the tongue wound may epithelialize quickly.[8]Deep abscesses are characterized by the inflammation of the muscle tissue in the deep tongue. A complete physical examination finds a marked increase in tongue swelling. Speech and food intake may be affected by this. In extreme cases, the patient cannot even breathe through their mouth or drink liquids. Severe patients may present with upper airway obstruction requiring an urgent tracheostomy.[9]The first step in effectively treating tongue abscesses is making the right diagnosis. Other necessary steps in the treatment process include drainage, making an incision, and preserving the airway. Next, Streptococci, Staphylococci, and Gram-negative anaerobes should be the focus of the appropriate antibiotic therapy. Aspiration alone is often insufficient therapy, and incision and drainage must be added because ongoing infection can lead to the recurrence of an abscess.[8]

4. Conclusion

Because of the tongue's extensive circulatory system, lymphatic drainage, and immunologic properties of saliva, tongue abscesses are relatively rare. Maintaining the airway, making an incision, and draining the abscess are all important steps in a thorough diagnosis and effective treatment of tongue abscess. Both gram-positive and gram-negative anaerobes should be treated with antibiotics.

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