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Case Report

Laryngeal Syphilis Mimicking a Malignant Process: A Case Report

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A B S T R A C T

Introduction: Laryngeal syphilis is an exceptionally rare manifestation of tertiary or secondary syphilis, accounting for a very small proportion of head and neck syphilitic lesions. Its clinical and endoscopic presentation, often mimicking laryngeal carcinoma, poses a significant diagnostic challenge and frequently leads to invasive investigations before the true etiology is identified.

Case presentation: We report the case of a 75-year-old man, with no significant past medical history, who presented with a 7-month history of dysphonia complicated by poorly tolerated dyspnea requiring emergency tracheostomy. Nasofibroscopy and computed tomography revealed a supraglottic laryngeal mass involving the epiglottis and aryepiglottic folds. Suspension laryngoscopy showed a friable, bleeding-on-contact exophytic tumor of the epiglottis, highly suggestive of malignancy. However, histopathological examination of biopsy specimens revealed subacute inflammatory ulcerating changes consistent with syphilitic laryngitis, and serological testing confirmed active syphilis with positive TPHA and VDRL tests. The patient was treated with intramuscular ceftriaxone for 10 days, with marked clinical improvement. Follow-up laryngoscopy showed residual epiglottic thickening without tumoral lesion, allowing successful decannulation.

Conclusion: Laryngeal syphilis should be included in the differential diagnosis of an exophytic, bleeding laryngeal mass, even in the absence of known risk factors, as its endoscopic appearance can closely mimic laryngeal carcinoma. Prompt histopathological and serological confirmation allows appropriate antibiotic treatment and avoids unnecessary oncological management.

Keywords: Laryngeal syphilis; Epiglottis; Dysphonia; Tracheostomy; Sexually transmitted infection

Introduction

Syphilis is a sexually transmitted infection caused by the spirochete Treponema pallidum, historically known as «the great imitator» for its ability to mimic a wide range of infectious and non-infectious conditions across virtually every organ system[1].

Despite the availability of effective and inexpensive treatment, global syphilis incidence has risen sharply over the past decade: the World Health Organization reported an increase in new cases among adults aged 15-49 from 7.1 million in 2020 to 8 million in 2022[2].

Head and neck mucosal involvement can occur at any stage of syphilis, but remains most frequently associated with the secondary and tertiary stages[3]. While oral and oropharyngeal lesions are relatively well described, laryngeal involvement is exceptionally rare, and the true incidence of laryngeal syphilis remains unknown due to the paucity of reported cases[3,4]. When it does occur, the larynx may be affected through direct mucosal contact, hematogenous dissemination, or, in tertiary disease, gummatous infiltration with cartilage destruction[4,5].

Clinically and endoscopically, laryngeal syphilis is a notorious mimicker of laryngeal carcinoma, presenting with hoarseness, dysphagia, or airway obstruction, and laryngoscopic findings ranging from diffuse edema to single or multiple ulcerative, exophytic, or infiltrative lesions[5,6]. This overlap frequently leads clinicians toward an initial suspicion of malignancy, delaying the correct diagnosis until histopathological examination and serological testing are performed[4,5].

Through this case report, we aim to illustrate the diagnostic challenge posed by laryngeal syphilis when presenting as an exophytic, bleeding epiglottic mass with airway compromise, and to underscore the importance of considering this rare but treatable entity before proceeding to more invasive oncological management.

Case Presentation

A 75-year-old man, with no significant past medical history, presented to the outpatient clinic with a 7-month history of dysphonia, complicated over the preceding 2 months by poorly tolerated episodes of dyspnea, requiring emergency tracheostomy. Nasofibroscopy revealed a polypoid lesion on the lingual surface of the epiglottis, extending to the left vallecula. Computed tomography (CT) showed a supraglottic laryngeal mass involving the epiglottis and the aryepiglottic folds **(Figure 1)**. The patient underwent suspension laryngoscopy, which revealed a friable, bleeding-on-contact, exophytic tumor occupying the lingual surface of the epiglottis, with edema of the laryngeal surface of the epiglottis. The remainder of the laryngeal examination was unremarkable. Biopsies of the tumor were performed. Histopathological examination revealed subacute inflammatory ulcerating changes, consistent with syphilitic laryngitis. Serological testing showed a positive Treponema pallidum hemagglutination assay (TPHA) and a positive Venereal Disease Research Laboratory (VDRL) test. The patient was started on intramuscular ceftriaxone for 10 days. Clinical evolution was marked by improvement. A follow-up laryngoscopy was performed, showing residual thickening of the epiglottis without tumoral lesion. The patient was successfully decannulated following treatment and this follow-up laryngoscopy.

Discussion

Laryngeal syphilis is an exceedingly rare manifestation of a resurging sexually transmitted infection. While syphilis has reappeared as an epidemic in many Western countries since the late 1990s, and global incidence continues to rise sharply, laryngeal involvement remains anecdotal, with only a limited number of cases reported in the literature over the past decades[2,3]. This case illustrates the diagnostic pitfall this rare localization represents when it mimics a laryngeal malignancy, particularly in an elderly patient with no identifiable risk factors and no reported cutaneous or genital lesions.

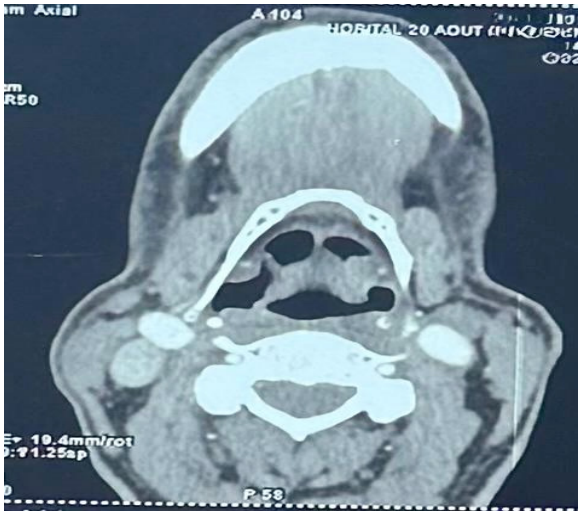

Figure 1: Axial contrast-enhanced CT scan showing a supraglottic laryngeal mass involving the epiglottis, with bilateral thickening of the aryepiglottic folds.

The larynx may be affected at any stage of syphilis, although most reported cases occur during the secondary or tertiary stages[3,5,6]. In secondary syphilis, laryngeal involvement typically presents as diffuse erythema, mucous patches, or superficial ulceration, generally associated with a concurrent cutaneous eruption or other mucosal lesions. In tertiary disease, gummatous infiltration can produce more destructive, exophytic, or ulcerative masses, sometimes with underlying perichondritis and cartilage involvement, closely simulating a malignant process, as observed in our patient with a bulky, bleeding epiglottic tumor[5,6].

The absence of a clear timeline or documented primary chancre in our patient is not unusual: the primary lesion is often unnoticed or asymptomatic, particularly when located in the oropharynx or larynx rather than the genital area, and patients frequently present directly with secondary or tertiary manifestations[3,4]. This underscores the importance of maintaining a broad differential diagnosis for any chronic, ulcerative, or exophytic laryngeal lesion, regardless of the apparent absence of risk factors, sexual history, or systemic symptoms.

The clinical and endoscopic overlap between laryngeal syphilis and squamous cell carcinoma is well documented, with both entities capable of producing exophytic, friable, bleeding lesions and airway compromise requiring emergency tracheostomy, as occurred in our patient[4-6]. This overlap explains why the diagnosis is rarely suspected clinically and is instead established through histopathological examination, which typically reveals nonspecific findings such as pseudoepitheliomatous hyperplasia, ulceration, and a dense submucosal infiltrate of plasma cells and lymphocytes, sometimes with obliterative endarteritis - findings consistent with the subacute inflammatory ulcerating changes observed in our patient's biopsy[5]. Because histology alone can be nonspecific, serological confirmation with treponemal (TPHA) and non-treponemal (VDRL) tests remains essential to establish the diagnosis with certainty, as was achieved in this case[3,4].

Regarding management, penicillin remains the treatment of choice for all stages of syphilis; however, ceftriaxone constitutes an effective and widely used alternative, particularly in cases of penicillin allergy or limited availability, with reported efficacy

in mucosal and laryngeal disease[3,5,6]. In our patient, a 10-day course of intramuscular ceftriaxone resulted in marked clinical improvement, with resolution of the tumoral lesion on follow-up laryngoscopy, residual epiglottic thickening only, and successful decannulation - an outcome consistent with previously reported favorable responses of laryngeal syphilis to antibiotic therapy alone, without any need for surgical resection[5,6].

This case reinforces the principle that laryngeal syphilis, despite its rarity, should be part of the differential diagnosis of any exophytic, ulcerative, or bleeding laryngeal mass - even in elderly patients without an overt sexual risk history - since prompt recognition allows for effective, non-invasive, curative treatment and avoids unnecessary oncological surgery.

Conclusion

Laryngeal syphilis is an exceptionally rare but treatable cause of a chronic, exophytic, bleeding laryngeal mass, capable of closely mimicking laryngeal carcinoma both clinically and endoscopically. This diagnosis should be considered even in elderly patients without an overt sexual risk history, particularly when airway compromise requires urgent intervention. Prompt histopathological and serological confirmation allows timely initiation of antibiotic therapy, achieving favorable clinical outcomes and avoiding unnecessary invasive oncological management.

References

1. Tudor ME, Al Aboud AM, Leslie SW, et al. Syphilis. In: StatPearls. Treasure Island (FL): StatPearls Publishing 2024.
2. World Health Organization. Global report on the health sector response to HIV, viral hepatitis and sexually transmitted infections, 2024. Geneva: WHO 2024.
3. Kluger N, Saint-Guily JL, Aractingi S. Dysphonia revealing early syphilis. Acta Derm Venereol 2008;88(2):167-168.
4. Guarino P, Chiari F, Carosi C, et al. Description of clinical cases and available diagnostic tools of oropharyngeal syphilis: a systematic review of the literature. BMC Infect Dis 2024;24(1):1252.
5. Lahav G, Lahav Y, Ciobotaro P, Ziv N, Halperin D. Laryngeal syphilis: A case report. Arch Otolaryngol Head Neck Surg 2011;137(3):294-297.
6. Asha'ari ZA, Razali MS, Ahmad RAR. Bilateral vocal cord palsy as the sole presentation of acquired syphilis. Malays J Med Sci 2010;17(2):56-60.