

Rare Manifestations of Syphilis in the Head and Neck: A Case Report

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Background

Syphilis, caused by *Treponema pallidum*, has resurged in the United States over the past five years. This poses diagnostic challenges for otolaryngologists as oropharyngeal lesions can mimic malignancy. Awareness of these atypical presentations prevents unnecessary oncologic procedures.

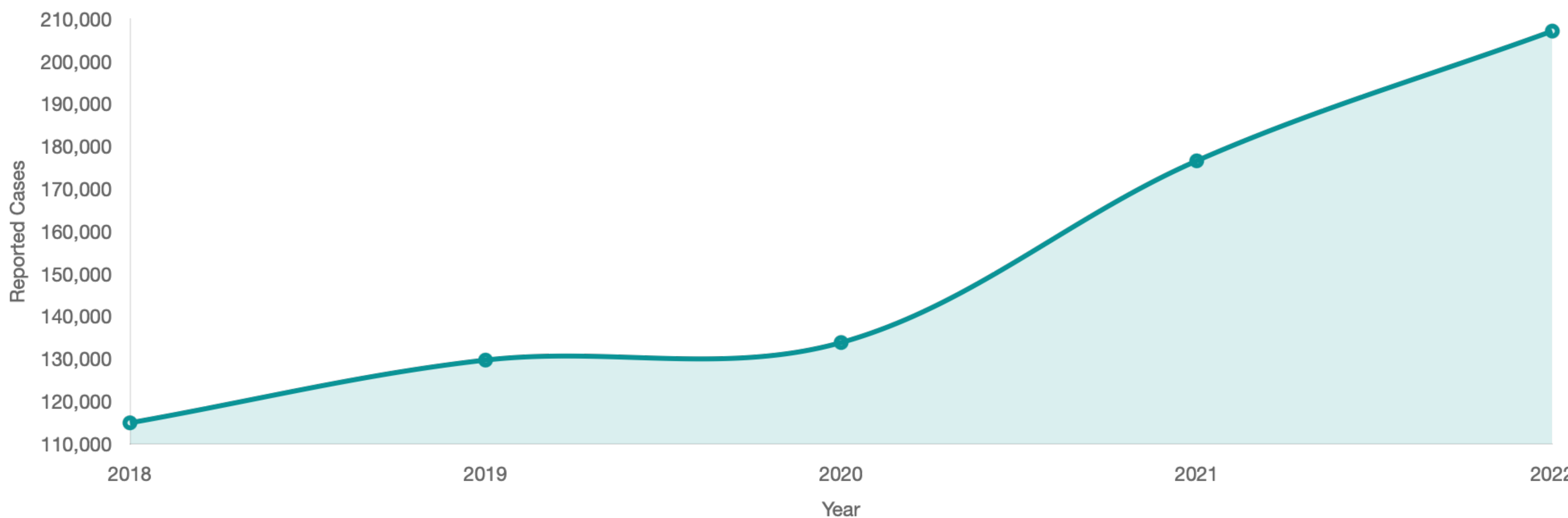


Figure 1. U.S. primary and secondary syphilis incidence (2018–2022, CDC).

Case Presentation

Patient Profile
19-year-old male

Presenting Symptom
Persistent odynophagia

Exam
Solitary 1 cm ulcer, erythematous with induration, no cervical LAD

Initial Impression
Suspicious for neoplasm; infectious etiologies (syphilis) considered

Diagnostic Workup

Clinical Evaluation
1 cm indurated ulcer; biopsy indicated.

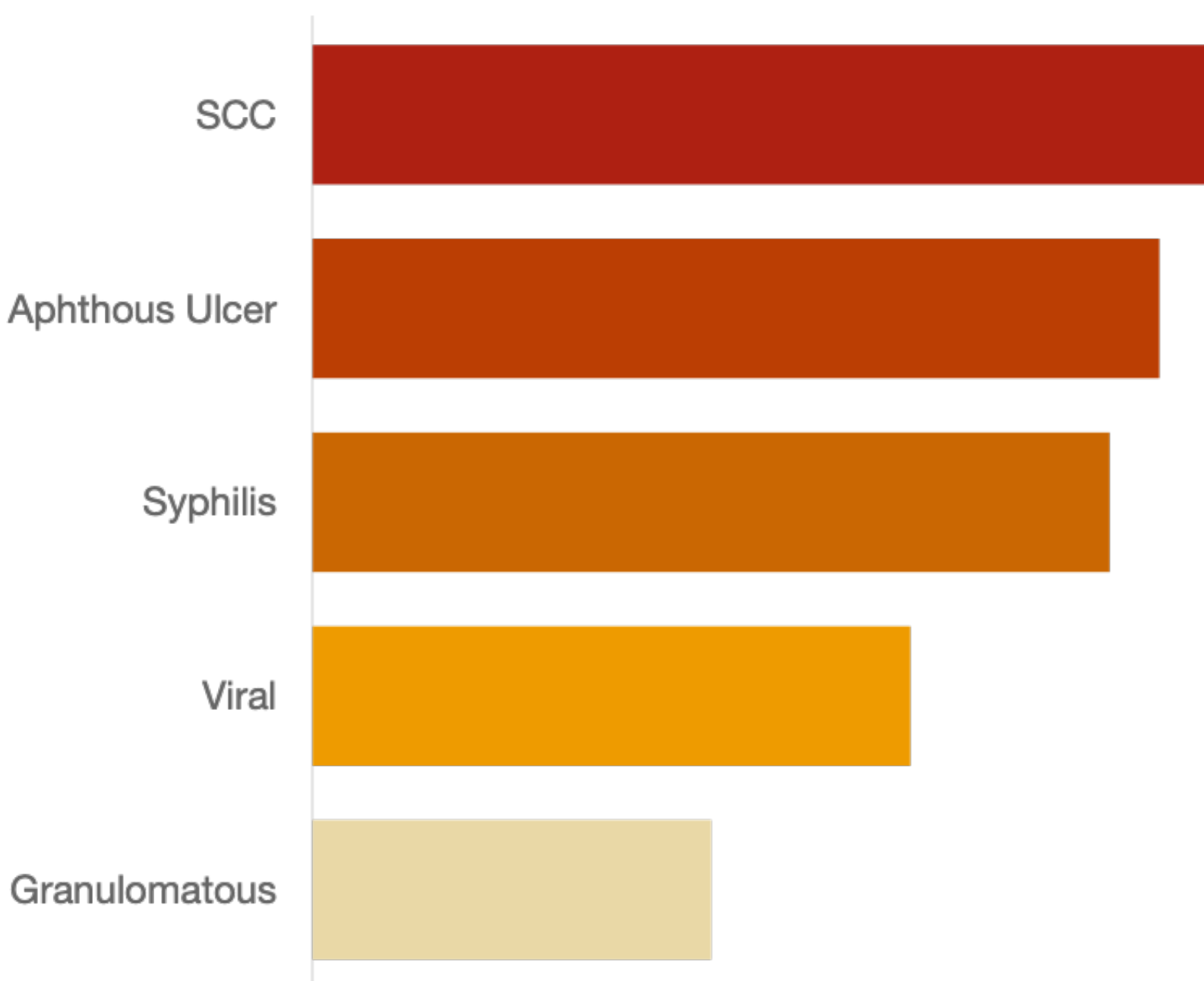
Serology
RPR & FTA-ABS positive → confirmed *T. pallidum*.

Histopathology
Chronic inflammation, spirochetes on Warthin–Starry stain.

Imaging
CT neck: no adenopathy or metastasis.

Diagnosis
Primary oropharyngeal syphilis confirmed.

Differential Diagnosis



Squamous Cell Carcinoma: Major differential; biopsy to exclude malignancy.

Major Aphthous Ulcer: Recurrent, lacks induration.

Syphilitic Chancre: Firm, classically painless; rising prevalence.

Viral Lesions: HSV/HPV; differ by course and morphology.

Granulomatous Infections: TB or deep fungal infections possible in immunocompromised hosts.

What Worked

Clinical Takeaways & A Call for Vigilance

- Broaden the Differential:** Syphilis must be included in the differential diagnosis for any atypical head and neck lesions, regardless of a patient's age or reported risk factors.
- Recognize Atypical Presentations:** Oropharyngeal syphilis can mimic neoplasms, and clinicians, especially otolaryngologists, must maintain a high index of suspicion to avoid misdiagnosis and delayed treatment.
- Effective Treatment:** Early-stage syphilis remains highly treatable. The patient was successfully treated with a single intramuscular dose of 2.4 million units of benzathine penicillin G, with complete resolution of symptoms.
- Prevent Progression:** Early diagnosis and treatment are crucial to prevent transmission and progression to severe tertiary complications like neurosyphilis and cardiovascular syphilis.

Public Health Imperative: Stay Vigilant



Heighten Suspicion

Include syphilis in atypical head & neck differentials across all risk profiles.



Educate & Inform

Enhance provider education on evolving epidemiology & oropharyngeal presentations.



Promote Screening

Encourage STI testing & awareness campaigns to prevent severe complications.

References

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