

Chief Complaint

Sore throat

History of Present Illness

A 17-year-old fully immunized female with past medical history of asthma presents with sore throat for 4 days. The patient was diagnosed with acute *Streptococcus* pharyngitis 2 days prior and discharged home with penicillin. However, she returns to the emergency department because of persistent, worsening sore throat, now endorsing associated muffled voice, hoarseness, dysphagia, odynophagia, and drooling. She denies any fevers, chills, shortness of breath, nausea, vomiting, or abdominal pain.

Of note, the patient was admitted for IV clindamycin a month earlier for acute pharyngitis and right-sided tonsillitis. CT soft tissue neck at the time did not show any evidence of abscess.

Pertinent Physical Exam

VS: T 37.8F, BP 121/69, P 87, R 16, O2 97% on RA

GEN: Alert. Mild distress 2/2 pain. No respiratory distress.

ENT: Hoarse, muffled “hot potato” voice and drooling present. Bilateral tonsillar swelling and erythema without exudates. Posterior oropharyngeal erythema noted. Uvula midline. Floor of mouth and tongue soft without elevation. No angioedema. No stridor.

NECK: Bilateral cervical adenopathy. Normal range of motion. No nuchal rigidity.

Pertinent Laboratory Data

WBC 15.8, Neutrophils 80.8%

Image

CT soft tissue neck with IV contrast, axial view



Case Discussion

The patient was administered IV morphine, hydromorphone, dexamethasone, and clindamycin in the ED. Given the concerning physical exam findings, CT soft tissue neck with IV contrast was obtained and revealed a 17 x 13 mm fluid collection within the right tonsil and a 20 x 22 mm fluid collection within the left tonsil, concerning for bilateral intratonsillar abscesses (see arrows). Enlarged lymph nodes were also seen along the carotid chains.

Attempts at needle aspiration in the ED were unsuccessful; thus, ENT was consulted for incision and drainage. Incision was created at both anterior tonsillar pillars with evacuation of purulence bilaterally from the abscess cavities. The patient was subsequently discharged from the ED on 14 days of amoxicillin-clavulanate and chlorhexidine mouth rinses and further advised to follow up with ENT for outpatient tonsillectomy.

While a peritonsillar abscess can often complicate simple tonsillitis, an intratonsillar abscess (ITA) is rare, with only approximately 30 cases previously reported in the medical literature.¹ Even more unheard of are bilateral ITAs as seen in our patient. Current literature review reveals only three prior case reports, two in adults and one in a child.²

Pearls

- ✧ Bilateral ITAs are exceedingly rare and should prompt urgent ENT consultation.
- ✧ Distinguishing peritonsillar vs intratonsillar abscesses can be difficult, as the clinical features are similar. CT imaging, however, can help to identify the exact location of the abscess cavity.^{2,3}
- ✧ Clinical management of ITA is somewhat variable due to its rarity. Because ITAs have less successful drainage attempts and lower recurrence rates, some otolaryngologists prefer treatment with IV antibiotics only, especially in the pediatric population.⁴ Others advocate for a procedural approach.³ Tonsillectomy may be indicated in instances of treatment failure or recurrence, as was the case with our patient.

Q & A

QUESTIONS:

1. What is the diagnosis and what is the initial management of the abnormality shown in the image above?
2. What common pathogens should you cover for?

ANSWERS:

1. The diagnosis is **bilateral intratonsillar abscesses**. Initial management often involves IV antibiotics and needle aspiration vs. incision and drainage.
2. *Streptococcus species, anaerobes, Eikenella, H. influenza, S. aureus*

References

1. Rai SJ, Madhuri G, Chandre GBV. Intratonsillar Abscess: Case Series of a Rare Entity. *J Otolaryngol Rhinol*. 2020;6(3):1-4.
2. Mohammed H, Scholfield D, Papesch M. Bilateral intratonsillar abscess: A novel management approach to a rare condition. *Kulak Burun Bogaz Ihtis Derg*. 2017;27(4):194-197.
3. Esmaili A, Hasan Z, Friedland P. A review and report of a rare clinical entity: Intratonsillar abscess. *Otolaryngology Case Reports*. 2018;6:43-46.
4. Ali SA, Kovatch KJ, Smith J, et al. Predictors of intratonsillar abscess versus peritonsillar abscess in the pediatric patient. *Int J Pediatr Otorhinolaryngol*. 2018 Nov;114:143-146.