

EM CASE OF THE WEEK.

BROWARD HEALTH MEDICAL CENTER
DEPARTMENT OF EMERGENCY MEDICINE



Care Warriors

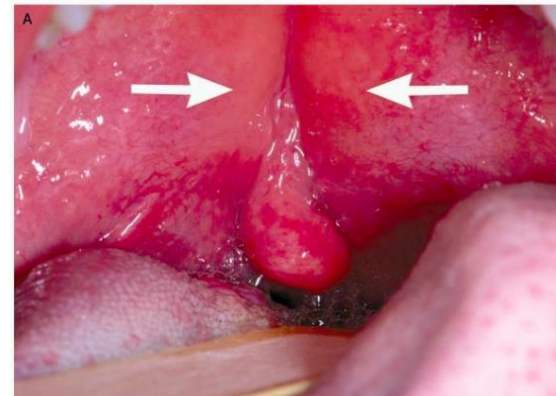
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Bilateral Peritonsillar Abscesses

A 37-year-old male with no past medical history presents to the Broward ED after being referred from an outside facility with fever/chills of 3-4 days which have been resolving, cough, drooling, sore throat and odynophagia persisting and worsening for the past week. He has never experienced these symptoms prior to this episode. He denies headaches, rashes, or fatigue. Patient is afebrile and vitals are within normal limits. On physical exam, he has tender anterior cervical lymphadenopathy, his tonsils are enlarged, hyperemic, and symmetrical with exudates, and uvula is midline. He speaks with a muffled voice and has difficulty opening his jaw completely. Sensation is intact over the face bilaterally. The patient has already gotten a CT scan of the head and neck, CBC, CMP and received a dose of Ceftriaxone and Dexamethasone at the outside facility. You get a repeat CBC which shows a WBC count increased from 24 to 30. Which of the following are the most appropriate next steps in management for this patient?

- A. Consult ENT to perform an I and D. Keep the patient on Ceftriaxone. Because the patient is clinically stable s/p I and D, send the patient home, advise return if symptoms worsen.
- B. Consult ENT to perform an I and D. Switch the patient from Ceftriaxone to Clindamycin. Although the patient is clinically stable s/p I and D, the wbc count has increased, implying impending doom. Admit the patient.
- C. Consult ENT to perform an I and D. Switch the patient from Ceftriaxone to Clindamycin. Because the patient is clinically stable s/p I and D, send the patient home, advise return if symptoms worsen.
- D. Consult ENT to perform an I and D. Keep the patient on Ceftriaxone. Although the patient is clinically stable s/p I and D, the WBC count has increased, implying impending doom. Admit the patient.



(via <https://www.nejm.org/doi/full/10.1056/NEJMicm072980>)

EM Case of the Week is a weekly "pop quiz" for ED staff.

The goal is to educate all ED personnel by sharing common pearls and pitfalls involving the care of ED patients. We intend on providing better patient care through better education for our nurses and staff.

BROWARD HEALTH MEDICAL CENTER

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Warriors

The correct answer is C. Consult ENT to perform an I and D. Switch the patient from Ceftriaxone to Clindamycin. Because the patient is clinically stable s/p I and D, send the patient home, advise return if symptoms worsen.

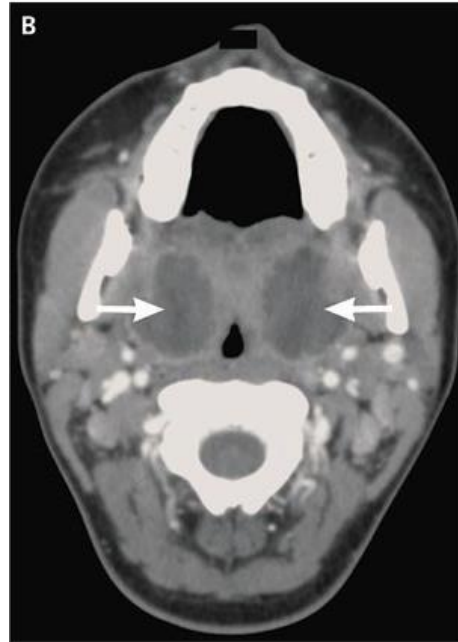
This patient has bilateral peritonsillar abscesses, which are quite rare. Due to the predominance of anerobic bacteria in the oral cavity and polymicrobial etiology of peritonsillar abscesses, Clindamycin has better coverage than Ceftriaxone. Remember that clinical judgement trumps treating "numbers." The patient's WBC count is likely due to the patient having received dexamethasone. Because this patient was not admitted follow-up should occur in 24-36 hours.

Discussion

Bilateral Peritonsillar Abscesses are a rare complication of acute tonsillitis, where purulent material surrounds the outside of the tonsillar capsule. Bilateral peritonsillar abscesses are much less common than unilateral abscesses. The overall incidence is reported close to only 5% for bilateral abscesses versus unilateral abscesses at 25%. Reoccurrence is estimated at 10-15%. Most common in males age 20-40. Streptococcus pyogenes was identified in 74% of abscess aspirates, the rest had Haemophilus, Neisseria, Staphylococcus, and anaerobes.

Lab options include getting a CBC,CMP, routine throat culture for group A strep, Gram stain, culture (anaerobic and aerobic), susceptibility testing of abscess fluid (could or could not get, would help narrow down the best antibiotic to use). A CT head and neck provides precise information regarding the retropharyngeal, parapharyngeal, lateral neck, and parotid spaces.

Prompt diagnosis is important to prevent spread into the skull or mediastinum. Other complications include bacteremia with sepsis, upper airway obstruction, aspiration pneumonia, suppurative thrombophlebitis of the internal jugular vein, and erosion into the carotid artery.



(via <https://www.nejm.org/doi/full/10.1056/NEJMicm072980>)

CT head and neck with IV contrast

Treatment

Initial evaluation must include accessing the airway in all deep neck infections.

Procedure options include tonsillectomy, incision and drainage, and needle aspiration. In this patient's case, an incision and drainage were performed. Tonsillectomy is encouraged for reoccurring abscesses.

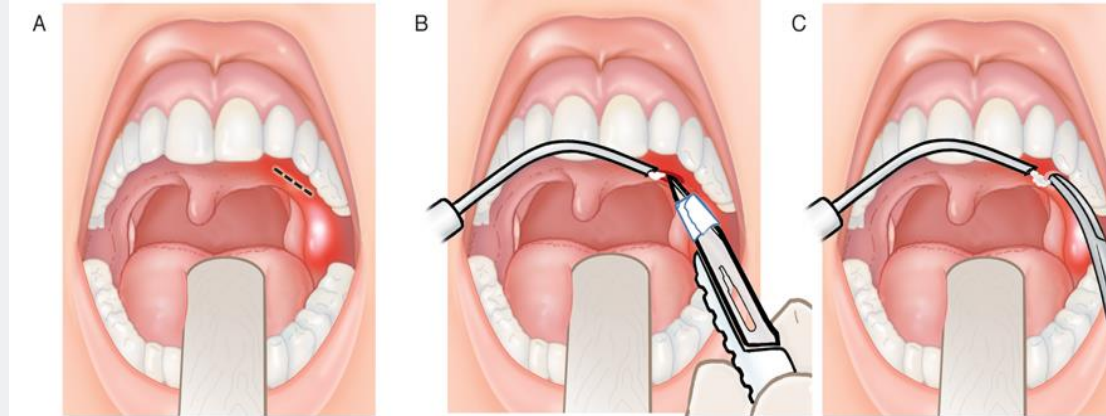
14 days of antibiotics (300 to 450 of Clindamycin every 6 hours from successful drainage should be enough). Ampicillin-sulbactam is another option. Glucocorticoid benefits seem inconsistent. In some trials, glucocorticoids appeared to hasten symptomatic improvement in combination with antibiotics and drainage. In other trials, only less pain at 24 hours was noted when dexamethasone was used compared to placebo.

Successful treatment is defined by symptomatic improvement in sore throat, fever, and/or tonsillar swelling within 24 hours of drainage.

For a list of educational lectures, grand rounds, workshops, and didactics please visit BrowardER.com and click on the "Conference" link.

All are welcome to attend!

Incision and Drainage



Source: Reichman EF: *Emergency Medicine Procedures, Second Edition*: www.accessmedicine.com

Differential Diagnosis

Epiglottitis- would be more rapidly progressive (more likely to have respiratory distress), than a peritonsillar abscess and occur in a younger population. However, the patient would similarly have drooling.

Retropharyngeal abscess or cellulitis-would be associated with minimal peritonsillar findings. Also, in contrast you would have neck stiffness especially in neck extension. Similarly, as in peritonsillar abscess, you would have a muffled voice.

Abscess of the parapharyngeal space- bulging would be behind the tonsillar pillars. The tonsils themselves would appear normal unlike in a peritonsillar abscess.

Severe tonsillopharyngitis- Similarly, you would have bilateral tonsillar swelling as in a bilateral peritonsillar abscess. Additionally, you would be more likely to have a viral exanthem as caused by HSV or Coxsackievirus. If you have a bilateral peritonsillar abscess, you are more likely to have pain while trying to open your jaw.

Take Home Points

- Remember Ceftriaxone isn't necessarily the best antibiotic for empiric coverage when dealing with oral flora. Clindamycin is a better choice.
- CT scan with IV contrast can be helpful in identifying bilateral peritonsillar abscesses because of their rare incidence and confusing clinical findings.
- Successful treatment is defined by symptomatic improvement in sore throat, fever, and/or tonsillar swelling within 24 hours.
- Always be careful to access the airway in patients with deep neck infections.

ABOUT THE AUTHOR

This month's case was written by Sushma Sudhi. Sushma is a 4th year medical student from NSU-COM. She did her emergency medicine rotation at BHM in January 2019. Sushma plans on pursuing a career in Pediatrics after graduation.

REFERENCES

"Peritonsillar Abscesses." *UpToDate*, www.uptodate.com/contents/peritonsillar-cellulitisabscess

Edinger, James. "Bilateral Peritonsillar Abscess: A Challenging Diagnosis." *Semantic Scholar*, 2007, pdfs.semanticscholar.org/263d

Lin, Yuan-Yung. "Bilateral peritonsillar abscesses complicating acute tonsillitis." NCBI. 2011.

<<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3153517/>>.