LEARNING OBJECTIVES

- To recognize a classic presentation of a rare but serious complication of acute pharyngitis
- To learn the red flag symptoms for young patients presenting with sore throat
- To appreciate Fusobacterium as a significant cause of pharyngitis in patients 15-30 years old

CASE PRESENTATION

A 21 year-old man presented to the Emergency Department with a 5 day history of sore throat, fatigue, and fevers. He had no significant past medical or surgical history. He was taking no medications and had no known drug allergies. He was a college student. He had recently visited his family in Fresno, California. No other recent travel. He did not smoke, drink, or use illicit drugs. He was sexually active with women and reported having unprotected sex with a new partner about a month prior to presentation.

Vital signs were significant for temperature 101.9°F, heart rate 113, blood pressure 94/43, respiratory rate 24, and oxygen saturation 94% on room air. On physical exam, he appeared ill and diaphoretic. Head and neck examination showed his tonsils were enlarged and erythematous without exudates. He had tender cervical adenopathy with swelling in the right lateral neck region. There were fine bibasilar crackles on pulmonary exam.

Laboratory results were significant for WBC of 10,000/mm3 and a platelet count of 61,000/mm3. Chest radiograph showed increased interstitial lung markings.

HOSPITAL COURSE

The patient was admitted for sepsis with a presumed pulmonary source and was started empirically on moxifloxacin and oseltamivir.

On hospital day 2 the patient’s clinical status worsened. He spiked high fevers, up to 104.5°F. On exam he was found to be in respiratory distress with a diffusely tender abdomen.

HIV Ab, heterophile Ab, and respiratory viral panel all returned negative.

Blood cultures returned positive for gram negative rods.

DISCUSSION

- Lemierre’s syndrome is characterized by a suppurative thrombophlebitis of the internal jugular vein and metastatic infections following an acute oropharyngeal infection, most frequently affecting healthy adolescents and young adults. Fusobacterium necrophorum is the causative organism in the majority of cases.

- In order to prevent the morbidity and mortality associated with the disease, the clinician needs a high degree of clinical suspicion to institute antimicrobial therapy directed against F. necrophorum early in the disease course.

- In the post-antibiotic era this disease has been referred to as “the forgotten disease” because it has been so rarely encountered. However, the last decade has shown a reemergence of Lemierre’s syndrome, perhaps because antibiotics are being used more sparingly for pharyngitis. Although a conservative approach may be appropriate in most cases, clinicians should recognize the red flags for adolescents and young adults presenting with pharyngitis including neck pain, unilateral neck swelling, sore throat persisting more than 3-5 days, and evidence of systemic illness.

- Our patient displayed all of the red flag symptoms and was started on anaerobic coverage early in his hospital course. He completed an 8 week course of clindamycin and was successfully discharged back to his baseline.

CLINICAL PEARLS

- Fusobacterium necrophorum is responsible for 10% of cases of sporadic pharyngitis in patients 15-30 years old.

- The approach to pharyngitis in a young patient with fevers and a tender or swollen neck should be aggressive.

- Consider a PCN + anaerobic coverage (clindamycin or metronidazole) for empiric treatment of serious pharyngitis in young patients, avoid macrolides which do not cover Fusobacterium.

REFERENCES
