ARE CLOTS OVERRATED? : A CASE OF LEMIERRE SYNDROME WITHOUT VENOUS THROMBOPHLEBITIS

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UPMC
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Introduction

Lemierre Syndrome is generally diagnosed with three primary findings: clinical oropharyngeal infection, internal jugular vein thrombosis/thrombophlebitis and septic emboli.

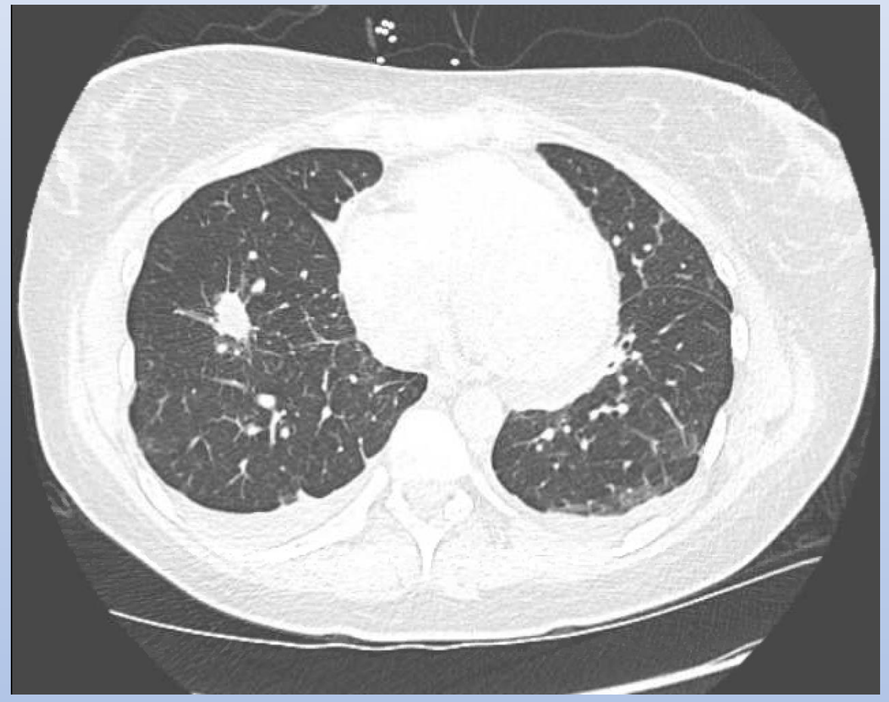
Case Summary

This is a case about a 39-year-old female who presented to the hospital with left tonsillar pain, associated odynophagia, fever and lethargy. Before presentation to the hospital, she was treated empirically with Azithromycin for 5 days outpatient without improvement.

On presentation, patient met sepsis criteria with fever of 102.6 °, tachycardia at 140 bpm, leukocytosis of 12.1 WBC/L and a suspected oropharyngeal source of infection. Initial physical examination revealed left tonsillar exudate. Chest X-ray revealed a 5 mm indeterminate nodule of the left upper lobe and focal density in the right lower lobe. Respiratory viral panel including COVID, influenza, RSV were negative. Monospot was positive. Blood cultures, HIV, Strep antigen, EBV panel were obtained. Pt's history was also significant for recent exposure to tick infested dogs and cats; therefore, a tick-borne panel was done including Rocky Mountain Spotted fever, ehrlichiosis, anaplasmosis, babesiosis and bartonella. Patient was empirically initiated on IV Ceftriaxone, Flagyl and Doxycycline.

Further evaluation with Chest scan with Intravenous contrast revealed multifocal nodular infiltrates and a small cavitary lesion. Preliminary cultures revealed gram negative bacteremia. Infectious Disease was consulted, who shared concern for Lemierre Syndrome therefore CT Neck/Chest with IV contrast was obtained. CT was negative for internal jugular vein thrombosis/thrombophlebitis; however, it did reveal findings suggestive of pulmonary septic emboli. Patient's blood cultures grew Fusobacterium species. The remaining infectious testing such as HIV, strep antigen, EBV panel and tick-borne panel were all negative.

CT Chest with IV Contrast of Lungs demonstrating bilateral numerous nodular infiltrates, presumed to be pulmonary septic emboli



Discussion

This case demonstrates the variability in diagnosis of Lemierre Syndrome. This patient had an oropharyngeal infection with sequalae of Fusobacterium bacteremia, and septic pulmonary emboli, without the thrombophlebitis typically associated with Lemierre. Patient was discharged with a right PICC line and IV Ceftriaxone for gram negative bacteremia without anticoagulation, however, she returned to the hospital 3 weeks later for right upper extremity deep venous thrombosis (DVT). She was discharged again on anticoagulation.

Patient had a repeat CT scan of Chest outpatient 4 months following initial scan, which revealed that nodules due to septic emboli had largely resolved with minimal residual nodules in former locations.

Conclusion

High suspicion for differential diagnoses such as Lemierre syndrome should be kept despite lack of demonstration of every criterion of the disease.

Although patient's DVT was likely provoked by ipsilateral PICC line, it raises the question on the role of anticoagulation in Lemierre Syndrome as there is no established consensus at this time.

References

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