

Case	(361) Lemierre syndrome: a not so uncommon cause of septic thromboembolism.
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CASE PRESENTATION

A 14-year-old female presented to the emergency department with a 15 days history of odynophagia, mild cervical swelling and progressively worsening fever. Despite intensive antibiotic therapy treatment the patient doesn't show improvement and he also presents increasing dyspnea.

Chest x-ray shows bilateral ill-defined nodular opacities and bilateral pleural effusion. He is admitted to hospital and blood cultures are extracted, which result positive for *Fusobacterium Necrophorum*.

Subsequently, contrast-enhanced CT of the neck and chest was performed showing a small abscess in the right parapharyngeal space, and an intraluminal filling defect in the right internal jugular vein, that suggested a thrombus in this location. Afterwards, cervical Doppler study confirmed the presence of thrombosis.

In the Thoracic CT, multiple pseudonodular lesions are identified in the periphery of both lung parenchyma, some of them with cavitation, presumably due to pulmonary septic emboli. Before these findings the diagnosis of Lemierre syndrome was concluded.

DISCUSSION

Lemierre syndrome is classically described as septic thrombophlebitis of the internal jugular vein caused by oropharyngeal infections. Patients usually present with lateral neck pain, swelling, and symptoms related to concurrent pharyngitis.

Fusobacterium necrophorum has been implicated as the most common bacterial cause.

Owing to clinical concern for peritonsillar abscess and complicated oropharyngeal infection, many cases of Lemierre syndrome are diagnosed at contrast-enhanced CT.

Findings include intraluminal filling defect in internal jugular vein, and in some cases perivenular inflammatory changes, peritonsillar abscess or marked striated enhancement of the pharyngeal mucosa. In addition, CT can show complications of Lemierre syndrome which are related to seeding of distant vascular beds by infected thrombi, most commonly in the lungs.

US is also a useful screening modality for Lemierre syndrome, but it is limited in showing the full extent of thrombosis and may not allow adequate assessment of the ancillary inflammatory findings.

CONCLUSION

Lemierre Syndrome is rare, but despite the number of cases decreased following the routine administration of antibiotics for pharyngitis, there has been a resurgence in the number of diagnoses cases in recent years.

After clinical suspicion, imaging tests play an important role to confirm the diagnosis.



Contrast-enhanced neck CT shows intraluminal filling defect in the right internal jugular vein (A , B) and an abscess in the right parapharyngeal space (C).

(D) Multiple cavitated pseudonodular lesions seen in contrast-enhanced chest CT , located in the periphery of both lung parenchyma. It is also shown a feeding vessel leading up to the parenchymal abnormality (black arrows) and bilateral pleural effusion (asteriks).

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