

# When A Sore Throat Takes A Sinister Turn

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## Introduction

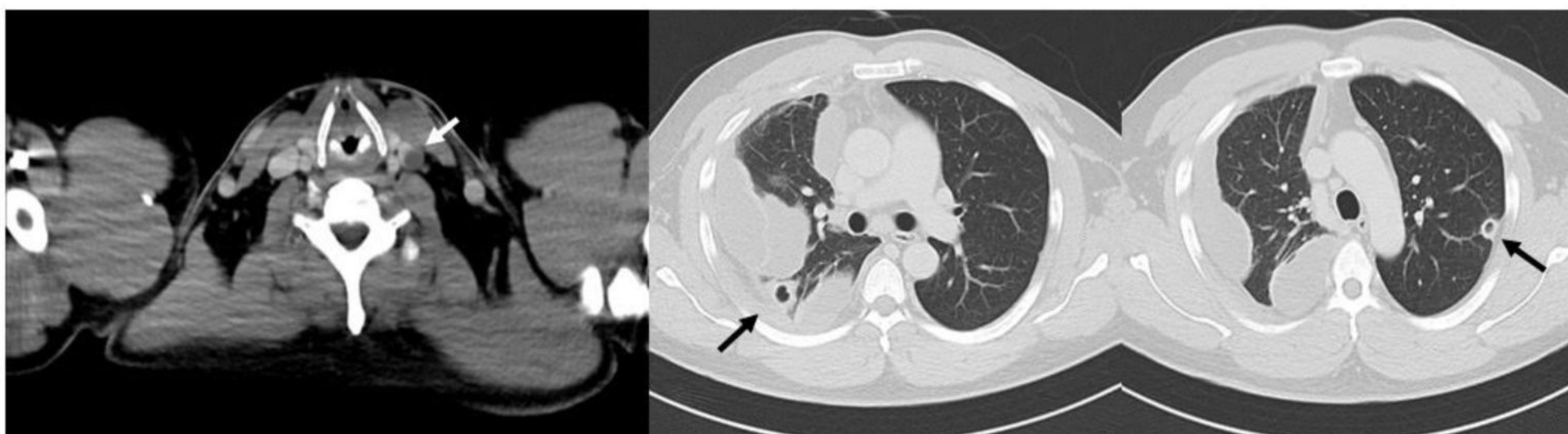
- **Lemierre's Syndrome:** Named after a French Bacteriologist Dr André Lemierre in 1936, Lemierre's Syndrome is a severe clinical triad of recent oropharyngeal infection, evidence of internal jugular vein thrombosis and septic embolism most commonly caused by *Fusobacterium necrophorum*.
- **History:** First reported in 1936, the patient presented with clinical symptoms of a sore throat, unilateral neck swelling and pain with rapid progression to sepsis and pulmonary abscesses.
- **Our Current World:** Today, the incidence of Lemierre's Syndrome is estimated at about 1 per million per year, largely affecting adolescents and young adults. The mortality rate is approximately 4-6%.
- **Clinical Challenge:** Being a relatively rare disease, it is easy to see how clinicians can potentially miss the diagnosis, simply dismissing it as a simple sore throat.

## Case Vignette

- A 38-year-old previously healthy man presented with a 4-day history of sore throat and fever. He was initially diagnosed with viral pharyngitis, treated symptomatically and discharged.
- The patient then re-presented to the Emergency Department with signs of impending septic shock. He was febrile (39°C), tachycardic (120 bpm), and had oxygen saturation of 90% on room air. Hemoptysis, pleuritic chest pain and subcutaneous crepitus on the chest prompted an urgent CT thorax.
- A left internal jugular vein thrombosis was noted incidentally, with multiple cavitary pulmonary nodules and a multiseptated right empyema. Pleural fluid culture grew *Fusobacterium necrophorum*, confirming Lemierre's Syndrome.
- The patient underwent surgical drainage and decortication, followed by targeted antibiotic therapy, resulting in full clinical recovery.

## Discussion / Learning Points

- **Clinical Acumen Matters:** In a day and age where lab tests and scans are readily available (especially in developed countries), the reliance on 2nd and 3rd order clinical investigations has subconsciously led to the gradual erosion of our clinical diagnostic prowess. Albeit a difficult case to diagnose clinically, this report reflects the importance of constantly exercising our clinical judgement for life-saving diagnoses. More than 20 years before the advent of CT scans, Dr André Lemierre spearheaded the discovery of such a disease.
- **Mortality:** Mortality rates for delayed diagnoses of Lemierre's can reach up to 18%. Given the difficulty to identify the diagnosis on initial presentations, it is crucial to maintain a high level of suspicion for more occult and sinister sources of a sore throat such as Lemierre's, especially when patients are not improving with initial treatment.
- **Discharge Advice:** This case highlights the importance of detailed red flag advice for patients on discharge even if patients present with a seemingly simple diagnosis such as a sore throat. It is fair to discharge such patients if there are no clinical symptoms and signs to suggest a serious infection, however due diligence should still be made with adequate red flag advice for patients to seek medical attention early should the condition show no clinical improvement within an expected time period.



### References

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