中文題目：罕見壞死桿菌引起急性化膿性扁桃腺炎與敗血性肺栓塞重症－個案報告

英文題目： Rare Lemierre syndrome case complicated with critical septic pulmonary emboli caused by *Fusobacterium necroforum*

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Introduction: *Fusobacterium necrophorum*, an obligate anaerobic gram negative bacilli, commonly inhabits in the animal alimentary tract. Slow growth and anaerobic aptness make it hard to be cultivated in the traditional petri dish. *F. necrophorum* may cause varied diseases such as tonsillar/peritonsilar abscess, thrombophlebitis, meningitis, urogenital and gastrointestinal infections. Lemierre syndrome with septic pulmonary emboli has been infrequently recognized in the clinical entity.

Case presentation: A 18-year-old previously healthy male without underlying disease visited the Emergency Department (ED) on August 21st, 2022 with complaints of sore throat and fever up to 38 ^{0}C for 2 days. Accompanied symptoms included chills, right chest pain during deep inspiration, and swallowing pain. At ED, suppurative inflammation of right tonsil, tachycardia (140 bpm) and tachypnea (22 breaths/min) with dyspnea were noted. The systolic blood pressure dropped from 154 mmHg to 136 mmHg few hours later. Laboratory data showed immature leukocytes (band: 5.8%), azotemia (Cr: 1.46 mg/dl), and increase in Hs-CRP (20.9 mg/dl) and D-dimers (1,990 IU/l) levels. The CXR film at admission did not show any pulmonary lesion, but the CT scan of chest showed few nodular lesions about 1-2 cm in diameters located in right upper lobe and right lower lobe with feeding sign. Septic pulmonary emboli with multiple organ dysfunction which Lemierre syndrome was highly suspected, he was admitted to the ICU for close monitoring and intensive treatment for restoration of blood pressure and renal function. The gram stain of blood culture aspirates after incubation for 18 hours showed small G(-) bacilli, and the following cultivated colonies were identified as *F. necrophorum*. No evidence of thrombosis in both carotid arteries and internal and external jugular veins was seen on the contrast-enhanced CT scans of head and neck. Appropriate antibiotics with flomoxef and metronidazole and oxygen therapy were instituted, and the patient recovered from respiratory distress and shock although the serial CXR films showed progression of pulmonary emboli and bilateral pleural effusions. The vital organ function restored soon, and the patient was discharged after 4 weeks of appropriate antibiotic therapy.

Discussion: The prevalence of Lemiere syndrome has been reported as rare as 1 case per million persons, and the first three origins are tonsils, pharynx, and chest. Source control of infection such as surgical removal of thrombotic internal jugular vein is often necessary for susccessful treatment. The CT angiography of our case did not show thrombosis of jugular vein and the severe infection was susccessfully treated only with appropriate antibiotics.

Conclusion: Lemiere syndrome manifested by septic pulmonary emboli and respiratory distress was rare but with significant morbidity and mortality. Young population presenting with symptoms of upper respiratory tract infections, distress, and severe sepsis should alarm the physicians to included this infrequent syndrome into differential diagnoses and response immediately and appropriately.