

## Rapid progression to septic shock caused by *Aggregatibacter aphrophilus* in a healthy patient

고려대학교 안암병원 내과<sup>1</sup>

기영민<sup>1</sup>, 손장욱<sup>1</sup>, 서진웅<sup>1</sup>

**Introduction:** *Aggregatibacter aphrophilus*, which belongs to the HACEK organisms, is a rare pathogen that can mainly cause infective endocarditis, brain abscess. We present a case of a rapid progression to septic shock and multi-organ failure following *A. aphrophilus* bacteremia in a healthy patient.

**Case Report:** A 56-year-old man admitted to the ICU with persistent fever, epigastric pain, jaundice for 3 days. He had no history of any underlying diseases. On examination his temperature was 38.3°C and blood pressure was 174/100 mmHg, but only after 2 hours, blood pressure dropped to 72/39 mmHg requiring a vasopressor. Physical examination of his abdomen revealed tenderness without rebound tenderness. On admission, investigations showed an increased leukocyte count of 18,630 cells/mm<sup>3</sup>, CRP of 191.86mg/L, and Procalcitonin of >100ng/mL. He underwent a CT scan without contrast for evaluation. Chest CT showed multifocal consolidations with cavitory changes, but abdomen CT revealed multiple GB stones without wall thickening. Abdomen sono reported chronic cholecystitis. Piperacillin-tazobactam as broad-spectrum antibiotics was started empirically. In this process, oxygen saturation deteriorated and ABGA showed progressive metabolic acidosis. The progression of acute kidney injury with oliguria was also observed. He was intubated for ventilator support and applied CRRT. On ICU day2, *A. aphrophilus*, sensitive to all classes of antibiotics, was reported in blood culture. Antibiotics was changed to cefotaxime and metronidazole. However, the fulminant multi-organ failure and metabolic acidosis was aggravated and on ICU day3, he was expired.

**Conclusion:** Although *A. aphrophilus* is a rare pathogen of infections, it can sometimes cause septic shock with fulminant multi-organ failure and rapid aggravation in a healthy patient. Further studies about the virulence factor and pathophysiology of *Aggregatibacter* are needed.

