

Pets, Not Always Your Best Friends: A Case Report

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Abstract

Capnocytophaga is a rare cause of severe septic shock which is often deadly. We report a case of a young patient with no evidence of dog bite and we recall the two main risk factors known to date.

Keywords: Capnocytophagacanimorsus; Dog Bite; Purpurafulminans; Septic Shock; Splenectomy

Case Report

A 32-year-old man consults the emergency department with a history of a rapid deterioration of his health status in the last 2 days. He complains of abdominal pain, fever with chills, vomiting and diarrhea. He had a history of alcohol abuse and a recent (6 weeks) splenectomy after a traffic accident. He was rapidly admitted to the intensive care unit for septic shock with multiple organs failure, metabolic acidosis and disseminated intravascular coagulation. Despite aggressive management combining inotropic and pressure support, mechanical ventilation, continuous veno-venous hemofiltration and a parenteral antibiotherapy combining ceftriaxone (6grams per day in three injections) and ampicillin (12grams per day in six injections), his condition rapidly worsened. He developed a diffuse purpura extended over his body (Figures 1,2). He died less than 48 hours after his admission in the intensive care unit.





Three days after his death, the microbiology laboratory will confirm the presence of a *Capnocytophaga Canimorsus* in the blood cultures. His family will confirm the presence of a dog at the patient's home, but there was no evidence for a dog bite or scratch recently. *Capnocytophaga Canimorsus* is a commensal Gram negative microorganism of dogs and cat's oral flora [1]. He often causes severe sepsis and his mortality rate is around 30 percent in the cases described in the literature [2,3]. It's very slow growth in the usual culture medium makes it difficult to identify. Therefore, if a *Capnocytophaga* infection is suspected, it's necessary to request a direct microscopic examination and to extend the duration of blood cultures [4]. The two main risk factors found in most cases are alcohol abuse and splenectomy (or immunocompromised patient) [5,6]. Therefore, in the presence of a dog (or cat) bite of scratch, these two risk factors must be systematically targeted and a preventive antibiotic therapy should be started [7].

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Conflict of Interest

No conflict of interest as conditions mentioned in the above statement. This study was conducted in accordance with the Declaration of Helsinki.

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