

Shlimazl

A few weeks ago I had a dialysis patient who presented with a chief complaint of “Shortness of Breath”. After working at Parkland for a year, you start to have an expecting sense of chronic players in the emergency department. You learn to note how tired their bodies look, feel, and sound. In my mind, dialysis patients can be sicker than they actually first look, an understatement in many cases. I was caught surprised by this particular patient’s body. It was war torn, glued-on and seemingly pieced together by unraveling threads. Her extremities were deformed, having survived multiple amputations and her limbs were doing what they could with the vitality left within them. What was striking was finding out that just a few years before, her body was whole. On chart review, the revelation that a simple dog bite had thrown my patient into septic shock was profound.

Who: Capnocytophaga canimorsus = immunocompromised patients, especially ones with asplenia, cirrhosis, or history of heavy alcohol use.

When: The delay between exposure and symptoms can occur between 1 and 30 days, though, on average, between 5 to 6 days.

Why: Half of the cases have a known history of dog bite, but other reports include scratches and even cases without either bites or scratches, just exposure to dogs or cats.

Immunology Why: Inhibits the innate immune system, including Toll-like receptors, complement-mediated killing, and macrophages.

What: Fulminant Septic Shock; fatality in 28 to 31% of cases

- Septic Shock: including disseminated purpuric lesions, renal insufficiency, and AMS

How: Other presentations besides septic shock include meningitis vs chorioamnionitis vs respiratory infections, just to name a few.

Where to begin?

1. Start with a **Beta-lactam-beta-lactamase combo** like piperacillin-tazobactam
2. A **Cephalosporin** (ie ceftriaxone vs cefepime)
3. or a **Carbapenem**
4. Consider prophylaxis for 5 days with **Augmentin** for your high-risk patients

After being bitten by a dog, my patient quickly decompensated in a gruesome way. Her extremities began to crumble away from ischemia after both fulminant septic shock and prolonged use of pressors; her kidneys were so maimed that she fast forwarded through the stages of renal disease. I’ve often sat in the ER thinking about the moments of someone’s life that propel them into hospital chronicity; their rate-determining step. For her, it could have been a misdiagnosis, delayed time to medical care, or just awful luck. Retrospect is both poignant and terrifying; one of our most valuable tools to practice daily.

Reference / Further Reading

- Uptodate

- <http://www.ncbi.nlm.nih.gov/pubmed/18722741>

- <http://www.ncbi.nlm.nih.gov/pubmed/17976760>