Roseomonas Mucosa, an Unwanted Valentine's Day Gift

Asad Mussarat, MD; Alexandra Anderson, MD; Ashley Van, MD; Jamie Tran, MD; Chris VanDreumel, MD; Fernanda Correa, MD; Keenan Hurst; Mark Maier; Hope Oddo Moise, MD; Ross McCarron, MD;
Department of Internal Medicine; LSU Health Sciences Center, New Orleans, LA

Case report: A 57-year-old female with a history of recurrent UTIs and multiple myeloma (treated with subsequent stem cell transplant and current chemotherapy) presented to the emergency department with a one-week duration of shortness of breath, body aches, sore throat, and cough. She had previously been evaluated at an outside facility where a chest x-ray was concerned for a left lower lung infiltration, but the patient's symptoms failed to improve with a 7-day levofloxacin course. On cardiopulmonary exam, bibasilar crackles were detected on auscultation. This immunocompromised patient was started on empiric vancomycin and piperacillin-tazobactam for presumptive sepsis. Sputum cultures, urine cultures, respiratory infection PCR, and blood cultures were all negative. However, blood cultures later grew the gram-negative rods *Roseomonas mucosa*. Infectious Disease was consulted and recommended de-escalating antibiotics to cefepime. With follow up blood cultures negative one week later, current antibiotics were deemed sufficient, and the patient was discharged with home health to complete a 21-day course of IV cefepime.

Discussion: *Roseomonas mucosa* is a slow-growing Gram-negative coccobacillus typically isolated from moist environments and skin flora. While it has low pathogenicity, it has been shown to be clinically significant in immunocompromised patients. It is particularly associated with peritoneal dialysis, catheter, and chemotherapy patients. We presented a case of a 57-year-old patient whose battle with cancer was complicated by a *Roseomonas mucosa* bacteremia. While *Roseomonas mucosa* has been shown to be sensitive to carbapenems and fluoroquinolones and more resistant to B-lactam antibiotics, this patient showed gradual improvement on IV cefepime. With it being a rarely isolated pathogen, recommended treatment duration expands to up to three weeks. Systematic review has suggested a 1% mortality associated with this species. However, further literature needs to be explored to reinforce the management for *Roseomonas mucosa.*