An Unusual Prostate Infection in a Man returning from El Salvador

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Introduction

We describe a man who traveled to El Salvador and developed a Burkholderia pseudomallei prostate abscess. While common in parts of Southeast Asia and Australia, this is only the second reported case of Burkholderia pseudomallei originating from El Salvador.

Case

A 29 year-old El Salvadorian male with newly diagnosed type 2 diabetes mellitus presented to our hospital with a 5-day history of dysuria, polyuria, and vomiting. On admission, he was febrile, tachycardic and orthostatic. Physical examination revealed right costovertebral tenderness, a normal abdominal exam and an enlarged non-tender prostate. Laboratory studies were pertinent for a WBC of 8980 cells/μL with 77% polymorphonuclear cells, 11% lymphocytes, and 8% monocytes; hemoglobin, 13.9 g/dL; and platelet count, 114,000/μL. The patient also had a serum glucose of 449 mg/dL with an anion gap of 17 and a hemoglobin A1C of 11%. Urinalysis showed 36 WBC/hpf, 3 RBC/hpf, occasional bacteria, and >1000 g/L glucose. HIV ELISA and malaria smears were negative. Blood cultures grew non-lactose fermenting, oxidase positive, gram negative rods. A CT scan of the pelvis revealed a 2.5 cm x 2.7 cm multi-loculated abscess, which was percutaneously drained. Burkholderia pseudomallei was isolated from both blood and abscess fluid. The patient was continued on parenteral antibiotic therapy for a total of 14 days and, based on the susceptibilities, was discharged on trimethoprim/sulfamethoxazole for an additional 3 weeks. He was instructed to return to our clinic, but was lost to follow up.

Discussion

Burkholderia pseudomallei is a gram negative facultative intracellular non-lactose fermenting bacillus that is found in contaminated water and soil and is spread to humans through direct contact with the contaminated source. The bacterium is the etiologic agent for melioidosis and is responsible for disease ranging from asymptomatic infection to fulminant sepsis. Clinically similar to glanders disease, illness manifests as either localized infection, pulmonary infection, bloodstream infection, or as a chronic suppurrative infection. Risk factors for infection include diabetes mellitus (as in our patient), heavy alcohol use, liver and renal disease, and impaired neutrophil function. Endemic in Southeast Asia and Northern Australia, Burkholderia pseudomallei is rarely reported elsewhere.

Conclusions

Though melioidosis is not typically found in the United States, it should be included in the differential diagnosis of gram negative bacillus prostate abscess or bacteremia in patients returning from endemic areas. This is only the second reported case of Burkholderia pseudomallei originating from El Salvador.

References