Puppies and PICCs: A Rare Development of Infantile Pasteurella Multocida Bacteremia, Empyema, and Nosocomial Stenotrophomonas Maltophilia Septicemia

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Received Aug. 21, 2024; Accepted for publication Aug. 26, 2024; Published online Aug. 27, 2024

https://doi.org/10.17161/kjm.vol17.22684

Introduction. *Pasteurella multocida* (PM) classically presents as local cellulitis or abscess inoculated via animal bite. Most patients recover; however, rarely some patients develop life threatening complications due to hematogenous spread.

Methods. A retrospective chart review studied a patient's presentation, workup, and treatment.

Results. An eight-month-old infant living with two dogs was presented to an outside hospital after developing a fever of 103°F. Pain was localized to left-lower extremity with an MRI, concerning for cellulitis. Blood cultures were obtained, and broad-spectrum antibiotics started at the outside hospital prior to transfer. Culture results were positive for PM. A lumbar puncture demonstrated pleocytosis, concerning for meningitis.

The head MRI depicted bifrontal subdural empyemas requiring craniotomy for washout. Patient was discharged with a PICC-line on IV ceftriaxone based upon culture susceptibility. Repeat brain MRI revealed near-complete resolution of the bifrontal subdural collections. Despite initial improvement, the patient was re-admitted for sepsis rule-out due to a fever in the setting of a central-line. The central-line and peripheral blood cultures revealed *Stenotrophomonas maltophilia* septicemia. Treatment included a two-week TMP/SMX course and PICC-line removal.

Conclusions. Classic PM cases present with local cutaneous manifestations, with only 7.8-11% disseminating to blood. Few cases of hematogenous spread resulting in subdural empyema are reported. Patients with severe manifestations of PM should be vigilantly monitored for further complications caused by *Stenotrophomonas maltophilia*, a multi-drug resistant and morbid bacterium, especially in immunocompromised and patients with central venous lines. This case highlights the importance of understanding the life-threatening complications of PM and central lines.