

Case report: *Edwardsiella tarda* Sepsis following Abortion

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Introduction

Edwardsiella tarda is a Gram negative bacterium of Family Enterobacteriaceae - primarily a pathogen of fish. Human infections with *E. tarda* are rare. Reports of *E. tarda* septicemia is exceptional (<5%) with mortality of 44.6%. We report a case of *E. tarda* sepsis following an abortion.

Case report

A 31 year old female patient (P₃C₂) with period of amenorrhea of 12 weeks and 2 days was admitted with a history of lower abdominal pain and vaginal bleeding for 1 day with a similar episode 1 week prior. Patient was febrile with 101⁰F on admission. Her past medical history was uneventful except gestational diabetes. Hematological investigations on admission revealed WBC–17.5X10³/UL with 80.0% granulocytes and CRP-52 mg/L. Abdominal ultrasound scanning found aborting fetus. Patient was started with empirical antibiotics as intravenous cefuroxime, metronidazole and gentamicin.

Blood culture developed turbidity, 24 hours after incubation and grew Gram negative, motile bacillus on blood, chocolate and MacConkey agar as non-lactose fermenter. Moderate amount of H₂S production was in Kligler Iron Agar (KIA) with acid butt and alkaline slant. Isolate was urease negative and indole positive. It was identified as *E. tarda* and was sensitive to most of the antibiotics: amikacin, cefotaxime, ceftazidime, cefuroxime, ciprofloxacin, co–amoxiclav, gentamicin and netilmicin but was resistant to polymyxin as per Stokes' comparative disc diffusion method.

Evacuation of Retained Products of Conception was done 2 days following admission. Following antibiotics, patient was afebrile and improved clinically. Parenteral antibiotics were continued for one week, patient had uneventful recovery and was discharged with one week of oral antibiotics.

Discussion

E. tarda resides in aquatic environment frequently in subtropical regions with humid and warm climates. Majority of human cases were reported with underlying risk factors as hepatobiliary diseases, iron overload, neonatal state and exposure to contaminated fresh/brackish water. Of importance in laboratory diagnosis, *E. tarda* is motile, non-lactose fermenting, indole-positive, urease-negative, H₂S-positive and majority (90%) are resistant to polymyxin while sensitive to most other antibiotics.

Due to non-availability of modern identification methods as, VITEK®, MALDI-TOF or PCR for confirmatory diagnosis, the bacterial identification was performed using phenotypic characters & biochemical tests.

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