



# EARLY SEPTIC ABORTION CAUSED BY *LISTERIA MONOCYTOGENES*: A RARE BUT DIRE INFECTION

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## INTRODUCTION

Primarily affecting special populations such as pregnant women; a food-borne pathogen called *Listeria monocytogenes* can be vertically transmitted from the mother, breaching the placental barrier that may result in fetal death. We present a case of *L. monocytogenes* bacteremia complicated with placental transfer in early pregnancy causing septic abortion making this instance extremely unusual.

## CASE DESCRIPTION

A 28-year-old female primigravida at 12 weeks of pregnancy presented with fever, vomiting, and watery diarrhea for 2 days. Upon presentation, she is febrile with a temperature of 39.2°C, tachycardic with a heart rate of 120 beats per minute, and her blood pressure within normal range. A diagnosis of septic miscarriage was established as she miscarried spontaneously. Her initial blood investigations revealed leukocytosis with a white blood cell count of  $16 \times 10^9/L$ , anemia with hemoglobin of 10.0 g/dL, and a platelet count of  $208 \times 10^9/L$ . There is evidence of transaminitis with alkaline phosphatase of 256 U/L, alanine transaminase of 75U/L, and total bilirubin of 74.5 umol/L. Intravenous ampicillin and metronidazole were empirically administered. After 24 hours, her blood culture sent was positive for gram-positive bacilli which later grew as small grey to translucent colonies with a narrow zone of  $\beta$  hemolysis on blood agar. A similar colony was identified from placental culture. The hanging drop method showed a characteristic tumbling motility and the CAMP test is positive. Subsequently, a phenotypic strip test (API Coryne®, bioMerieux, Marcy l'Etoile, France) was done, revealing *L. monocytogenes* with good discrimination of 95.4%. The isolate was sensitive to penicillin, ampicillin, gentamicin, cefotaxime, and cotrimoxazole. She was discharged well with full resolution of the transaminitis after 2 weeks of ampicillin treatment. The follow-up blood culture was negative. A distinctive risk factor of invasive listeriosis in this patient includes consuming raw salads and sushi.

## CONCLUSION

Listeriosis affects the obstetric group more frequently likely because pregnancy lowers cellular immunity. The eating habits of pregnant women as they eat more high-risk items such as raw milk cheese, processed foods, pre-cooked food, and unpasteurized dairy products make them more prone to *L. monocytogenes* contamination and may be linked to a higher occurrence during pregnancy.

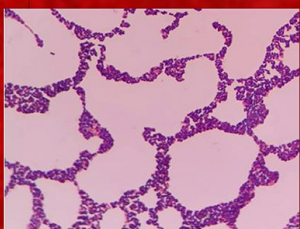


Figure 1 A. grain stain showed positive rods.



Figure 1 B. Grey to translucent pint point colonies with indistinct beta hemolysis on blood agar



Figure 2 A. Near "umbrella" shape pattern in semi solid medium.

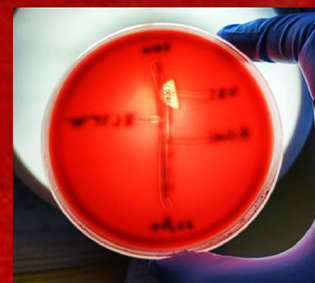


Figure 2 B. CAMP test positive for *Listeria* sp