Acute Cholecystitis and Fetal Loss Due to *Listeria monocytogenes* in Early Pregnancy

Dear Editor,

A 23-year-old pregnant woman in her first trimester was admitted with high-grade fever, right hypochondrial pain, and vomiting for 1 week. She had right hypochondrial tenderness, and the fetal heart sounds were not audible.

Hemoglobin was 8.9 g/dl, total leukocyte count was 10,400/ml with neutrophil predominance, platelet count was 156,000/μl, and C-reactive protein was high. The blood chemistries were normal. Ultrasonography of the abdomen showed acalculous cholecystitis and a gravid uterus with a single fetus without cardiac activity. Blood culture was positive in 24 h and was identified as *Listeria monocytogenes* with matrix-assisted laser desorption ionization time-of-flight mass spectrometry (MALDI-TOF MS). The patient was initially managed with piperacillin–tazobactam which was changed to ampicillin 2 g intravenously every 4 h. A transthoracic echocardiogram did not show any vegetation. She was afebrile and had no abdominal pain after initiating ampicillin which was continued for 2 weeks intravenous.

Pregnancy, immunosuppressed individuals, newborns, and the elderly are at high risk of developing listeriosis.[1,2] Maternal listeriosis is more common in the third trimester and is mild.[3] Biliary tract infection due to listeria is rare.[4,5] Acute cholecystitis caused by *L. monocytogenes* is even more uncommon, with only 23 cases reported in the literature.[2] All cases of acute cholecystitis reported previously in females were outside pregnancy.[2]

Infections during early pregnancy cause spontaneous abortions, whereas those occurring in the second or third trimester of pregnancy are complicated with stillbirths, fetal loss, or abortion in 26% of cases.[6] Neonatal listeriosis causes pustular lesions of the skin and pharynx, hypothermia, salmon-colored truncal papules, and meningitis.[7] This is the first case of listeriosis reported in Dhofar Governorate, Sultanate of Oman (Directorate of Disease Surveillance and Control, DGHS, MoH, Dhofar, Sultanate of Oman report – June 2024).

We describe a female with acute cholecystitis and fetal loss due to *L. monocytogenes* in early pregnancy. Acute cholecystitis secondary to *L. monocytogenes* in pregnancy was not reported previously. Physicians and obstetricians should be aware of the unusual complications of listeria and the importance of early identification of the pathogen by MALDI-TOF MS.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given her consent for her images and other clinical information to be reported in the journal. The patient understands that her name and initials will not be published and due efforts will be made to conceal her identity, but anonymity cannot be guaranteed.

Research quality and ethics statement

The authors followed applicable EQUATOR Network (http://www.equator-network.org/) guidelines, notably the CARE guideline, during the conduct of this report.

We also certify that none of the authors is a member of the Editorial Board of the JGID.

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Conflicts of interest
There are no conflicts of interest.

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