Short Report: *Campylobacter fetus* Bacteremia in an Immunocompetent Traveler

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Abstract. *Campylobacter fetus* bacteremia is a rare human infection that occurs almost exclusively in the setting of advanced age, immunosuppression, human immunodeficiency virus infection, alcoholism, or recent gastrointestinal surgery. This report of *C. fetus* bacteremia in a 39-year-old immunocompetent traveler who ate raw beef identifies *C. fetus* as a potential emerging pathogen in normal hosts.

Campylobacter fetus is a common pathogen of cattle, sheep, and other ungulates. Human *C. fetus* infection is associated with consumption of raw or undercooked meat, unpasteurized milk, and other uncooked foods.¹ Although the *Campylobacter* genus is a common cause of gastrointestinal symptoms in humans, *C. fetus* bacteremia is very rare, occurring almost exclusively in the setting of advanced age, immunosuppression, human immunodeficiency virus (HIV) infection, alcoholism, or recent gastrointestinal surgery.² We report a case of *C. fetus* bacteremia in an immunocompetent patient after travel to Ethiopia.

A 39-year-old Ethiopian male presented with fever, hypotension, tachycardia, watery diarrhea, lower back and hip pain, nausea, and vomiting. His symptoms began 2 days after returning from a trip to Addis Ababa, Ethiopia, where he stayed within the city for 3 months to visit his family. He reported eating uncooked beef and raw honey during his trip. He did not take malarial prophylaxis because of the high elevation of the area. He reported consuming two to three alcoholic beverages a week, and his medical history was significant only for mild hepatic steatosis, treated latent tuberculosis infection 15 years before, and obstructive sleep apnea. His initial hospital treatment included intravenous fluid resuscitation as well as intravenous vancomycin and piperacillin/tazobactam. An abdominal computed tomography scan without contrast revealed a diffusely distended colon with multiple air–fluid levels. The patient was transitioned to oral ciprofloxacin and metronidazole as he clinically improved. Blood cultures were positive for *C. fetus* on day 3 of hospitalization. Because fluoroquinolone resistance in *C. fetus* can exceed 30%,³ antibiotic therapy was empirically changed to azithromycin, and the patient was discharged to complete a 14-day total antibiotic course. Other laboratory testing revealed three negative malaria smears, normal immunoglobulin levels, a negative serum HIV enzyme-linked immunosorbent assay, negative anti-Hepatitis C virus antibodies, and positive Hepatitis B surface antibodies.

Reports on the incidence of *C. fetus* bacteremia vary. Of 183 episodes of *Campylobacter* bacteremia in 23 French hospitals between 2000 and 2004, 53% were caused by *C. fetus*.³ Other investigators have identified *C. fetus* less frequently; 19% of 71 *Campylobacter* bacteremia episodes were *C. fetus* in one Spanish teaching hospital over 23 years, and 8.6% of

394 *Campylobacter* bacteremia cases were *C. fetus* in an English report spanning 11 years.^{4,5} Although the Centers for Disease Control and Prevention Foodborne Outbreak Online Database (FOOD) reported only one confirmed case of *C. fetus* infection from 1998 to 2011, US cases may be underreported.⁶ Cases of *C. fetus* bacteremia are more likely to occur in patients with advanced age, comorbid illness, or immunodeficiency.³ Our case shows that systemic infection from this organism can occur in immunocompetent individuals and highlights the importance of pre-travel education on sanitary food practices.

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