Letters to the Editor

Enteric Fever-Like Syndrome Caused by Raoultella ornithinolytica (Klebsiella ornithinolytica)

Raoultella ornithinolytica (formerly Klebsiella ornithinolytica) is a gram-negative aerobic bacillus in the family Enterobacteriaceae. This species has been related to histamine-producing bacteria causing subsequent fish poisoning (5). R. ornithinolytica has also been isolated from dentin of infected root canals (8). However, human infections caused by bacteria of the genus Raoultella are infrequent, and spontaneously occurring bacteremia cases have not been reported. Here, we present a case of enteric fever-like syndrome and bacteremia caused by R. ornithinolytica.

An 82-year-old woman with a history of arterial hypertension and degenerative arthropathy presented at the emergency service suffering from a fever (38°C) and hypotension (84/48 mm Hg). Previously, she had been complaining of subjective fever, hypogastriaic pain, dizziness, and profuse sweating. The patient’s white blood cell count was 11,500 cells/mm³, her erythrocyte sedimentation rate was 30 mm/h, and her C-reactive protein level was 0.95 mg/ml. During her stay, she had a diarrheic episode. Blood and fecal samples were cultured, and antimicrobial therapy with 500 mg ciprofloxacin twice a day orally for 10 days was begun. After 24 h, blood cultures became positive, and a gram-negative bacillus was isolated. The isolated bacterium from blood was lactose, indole, and ornithine positive and was identified by the Wider system (Francisco Soria Melguizo S.A., Madrid, Spain) as R. ornithinolytica, biotype 77755370. Stool cultures yielded mucous colonies of a lactose-positive, gram-negative bacillus identified as R. ornithinolytica by an API-20E strip (bioMérieux, Marcy l’Etoile, France) with the code 5355773. CLSI standards were used for microdilution testing. Nalidixic acid and ciprofloxacin MICs (>16 mg/liter) and a marked decrease in sensitivity to ciprofloxacin (MIC, 1 mg/liter) are produced by R. ornithinolytica bacteremia appeared to be limited and did not recur during therapy, and a course of antibiotic treatment for 10 to 14 days with amoxicillin-clavulanic acid seemed to be curative.

In conclusion, Raoultella ornithinolytica is an uncommon cause of enteric fever-like syndrome characterized by fever, headache, and abdominal pain that may be clinically indistinguishable from enteric fever caused by Salmonella enterica serovar Typhi or other salmonellae and should be included in the differential diagnosis of enteric fever.

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Certain epidemiologic data, such as an association with fish consumption, may be of value in the diagnosis of enteric fever-like syndrome, since this syndrome is suspected to be a foodborne disease caused by microbial agents or their toxins.

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