Pediococci are homofermentative, gram-positive, nonmotile, catalase-negative facultative anaerobes of the family Streptococcaceae and are used in the biotechnology and food industries (1, 2, 7). The ecological niche of pediococci in humans appears to be the enteral tract (7). Although pediococci have been described as harmless bacteria (5), they have been infrequently recovered from the human respiratory tract and saliva and also from other clinical specimens, viz., stool, urine, wounds, abscesses, peritoneal fluid, and blood from immunocompromised patients with various underlying conditions including burns, malignancies, cardiovascular disease, chronic lung disease, and diabetes mellitus (1–3, 5–8). They have not, however, previously been recovered from pregnant women.

Of the eight species of the genus Pediococcus currently recognized (1), only Pediococcus acidilactici and P. pentosaceus have been described as human pathogens causing septicemia, hepatic abscesses, and bacteremia (2, 3, 5, 8). Pediococci appear on Gram’s stains to be arranged in tetrads (1, 2, 5, 7) and clusters and are universally resistant to vancomycin and teicoplanin (1, 2, 6, 7).

We report a case of pneumonitis and bacteremia caused by P. acidilactici in a pregnant woman. A 26-year-old primigravida with a history of chronic bronchitis was admitted to Jawaharlal Nehru Hospital, Madhya Pradesh, India, at 14 weeks of pregnancy after 6 days of fever and purulent expectoration. She had received oral amoxicillin at 250 mg three times a day for 7 days 8 months prior to the diagnosis of pregnancy. She was febrile (40°C), tachypneic, and normotensive and had mild hepatosplenomegaly, patchy bilateral pneumonitis, and a single viable lung abscess. Echocardiography revealed a normal left ventricle and a large pericardial effusion. The organism was identified in the third hospital week from sputum and blood cultures by failure to ferment arabinose, which was incubated in air for 4 days (6). The isolate showed positivity for arabinose utilization and was negative for sucrose and maltose fermentation (2). P. acidilactici was differentiated from P. pentosaceus by failure to ferment maltose (1) or sucrose (6) and the ability to utilize arabinose in cysteine-trypticase agar (6). The antimicrobial susceptibility of our isolate was determined by the Kirby-Bauer disk diffusion method in Mueller-Hinton agar supplemented with 5% sheep blood following incubation for 18 h at 37°C. The organism was susceptible to penicillin G, ampicillin, chloramphenicol, gentamicin, netilmicin, norfloxacin, and ciprofloxacin (5-μg disk zone diameters of 16 mm or larger) and resistant to vancomycin, cloxacillin, cefazidine, cephradine, cefotaxime, cefazolin, cefuroxime, tetracycline, and erythromycin (zone diameters of 10 mm or smaller). The isolate did not exhibit intermediate susceptibility (zone diameters of 10 to 16 mm) to the antibiotics tested. While Tankovic et al. (9) and Golledge et al. (3) have reported susceptibility to penicillin, other reports have noted pediococci to be mostly moderately susceptible to penicillin and resistant to quinolones (2, 5–8).

Treatment with ceftriaxone was discontinued. Treatment with benzyl penicillin at 2 million U intravenously every 6 h was started. Defervescence occurred promptly, within 48 h. Therapy was continued for a total of 10 days. Subsequent cultures of blood and sputum remained sterile. The patient was discharged on the 15th hospital day. At follow-up 2 months later, she was well, with a normal fetus of 24 weeks’ gestation. There appears to be little doubt that P. acidilactici is a rare clinical isolate and an opportunistic pathogen (7). This report underlines the importance of accurate identification of organisms found to be vancomycin-resistant; shows that pregnancy, with depressed humoral and polymorphonuclear functions beginning with the second trimester (4), is one of the underlying predisposing factors for P. acidilactici infection; and reveals the benefits of initiation of prompt and specific antibiotic therapy.

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REFERENCES
Podila S. Sarma
Department of Medicine

Smruti Mohanty
Department of Microbiology
Jawaharlal Nehru Hospital & Research Centre
Bhilainagar-6
Madhya Pradesh 490006, India