CORRESPONDENCE

AEROMONAS JANDAEI CELLULITIS AND BACTEREMIA IN A MAN WITH DIABETES

To the Editor:

Aeromonas jandaei is one of five mesophilic genomospecies of *Aeromonadaceae* that cause gastroenteritis, bacteremia, and wound infection in both immunocompetent and immunocompromised humans who are exposed to sources of fresh water (1–4). I report a case of cellulitis and bacteremia due to *A. jandaei* infection after a snake bite.

A 75-year-old man with non–insulin-dependent diabetes was hospitalized with a 24-hour history of fever and painful digital swelling after a snake bite. On examination, he was toxic, febrile, and normotensive, with signs of cellulitis of his right index finger. His hemoglobin level was 126 g/L, and his total white blood cell count was 18×10^3 cells per μL (86% polymorphonuclear leukocytes, 10% bands). A radiograph of his right hand showed soft tissue swelling. His blood glucose level was 26 mmol/L. Results of renal and hepatic function tests were normal, as was his blood coagulation profile. He was given prophylaxis for tetanus. Polyvalent antisnake venom, penicillin, cloxacillin, ciprofloxacin, metronidazole, saline, and crystalline insulin were administered intravenously.

Within 24 hours of hospitalization, the cellulitis worsened and the terminal phalynx of the index finger became gangrenous. In addition, the patient's hand and forearm were swollen, and regional lymphadenopathy was noted. Pus was drained, the bite wound was debrided, and the phalynx of his index finger was amputated. During the next 4 days, his temperature fluctuated between 38°C and 40°C, and he remained very ill. Three days after the initial collection and incubation, the blood, pus, and debrided tissue obtained for culture yielded a glucose-fermenting, anaerobic, oxidase-positive, gram-negative bacillus on blood and MacConkey agar. Species identification of *A. jandaei* was based on the criteria developed by Carnahan et al. (1).

The isolate was susceptible to third-generation cephalosporins, chloramphenicol, fluoroquinolones, aminoglycosides, and trimethoprim-sulfamethoxazole; it was resistant to penicillins, colistin, imipenem, and narrow-spectrum cephalosporins. These results were similar to those previously reported for *A. jandaei* (1–3,5). *Pseudomonas aeruginosa* and *Staphylococcus aureus* that were susceptible to the administered antibiotics were co-isolated from the pus culture. The cellulitis improved, and the patient's fever resolved on day 6 of hospitalization. Subsequent blood and pus cultures and a radiograph of the hand remained noncontributory. Therapy was continued for 10 days. Three months later at follow-up, the patient was doing well on oral antidiabetic therapy.

Snakes' oral flora comprises a wide range of aerobic and anaerobic organisms, especially fecal gram-negative rods because their prey usually defecate while being ingested (6,7). In humans, snake venom causes extensive tissue destruction and devitalization, which predisposes to polymicrobial infection from the snake's indigenous oral flora (6–8). *Aeromonas* species are autochthonous to aquatic environments worldwide and infect warm- and cold-blooded vertebrates, including frogs, fish, reptiles, snakes, and birds (2–4,9). One case of *A. hydrophila* infection after a snake bite has been reported (10). Most of the *Aeromonas* species isolated from infected human wounds occur as a part of polymicrobial flora (1–4), which may overshadow their clinical significance. In our patient, *P. aeruginosa* and *S. aureus* were isolated concurrently with *A. jandaei* from pus but were considered nonsystemic pathogens, as they were not grown in serial blood cultures.

The recommended therapy for *A. jandaei* septicemia is treatment with fluoroquinolones (4,8). The alternate therapies include aminoglycosides and third-generation cephalosporins (2–4,5).

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