Letters to the Editor

Urinary Tract Infection Caused by Eikenella corrodens

To date, Eikenella corrodens, a fastidious, gram-negative rod, has not been recognized as a causative agent of urinary tract infections. Until now the organism has been isolated from infective endocarditis, abdominal, joint, and bone infections (3, 7), human bite wounds (9), genital ulcers after traumatic orogenital contact (5, 6), and other sites (3, 7, 10). E. corrodens is part of the human oropharyngeal and probably intestinal flora (8, 10).

In spring 2006, we encountered the case of an 83-year-old female with a urinary tract infection due to E. corrodens. The patient was referred to the Hospital of Sursee (Switzerland) with general malaise, abdominal pain, burning during micturition, and pollakiuria. Chronic lymphatic leukemia had been diagnosed in 2003. Prior to admission, the patient had a 2-year history of recurrent urinary tract infections. However, no infective agent could be isolated from her urine. There was also a history of recurrent anal prolapse and sigmoidal diverticulitis. Analysis of urine specimens collected from a permanent catheter 1 week after the end of antibiotic therapy, with more than 500 leukocytes per μl, protein of 1 g/liter, more than 500 leukocytes per μl, and large quantities of erythrocytes and bacteria.

On cysine-lactose-lysine-deficient agar (UrinAX CL/MCE; AxonLab AG, Baden, Switzerland) hypochlorite-smelling colonies (10^3 CFU/ml) were detected, together with a few colonies of viridans streptococci (<10^4 CFU/ml). The latter were considered contaminants after Aerococcus urinae had been excluded. Identification of the gram-negative rods yielded Eikenella corrodens. On sheep blood agar, pit-forming colonies were detected. Microscopy revealed slender, gram-negative rods which did not grow on MacConkey agar, were nonfermentative on triple sugar iron agar (group IV), and were positive for oxidase, nitrate reductase, and ornithine decarboxylase. The rods were nonmotile; exhibited negative results for catalase, urease, and indole; and did not ferment glucose, sucrose, and maltose. Since no standards for the disk diffusion assay are available from the Clinical and Laboratory Standards Institute (CLSI) for this organism, the antibiogram was read visually and large zones of inhibition for colonization and infection of the urinary tract by an intestinal commensal, and (iv) there was a complete clinical and bacteriological recovery from the urinary tract infection after appropriate antibiotic therapy.

This report demonstrates that E. corrodens is able to cause urinary tract infections, especially when additional risk factors are present.

REFERENCES


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