
Letter to the Editor

Peritoneal Dialysis-Related Peritonitis Caused by *Brevibacterium* Spp

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Dear Editor,

Brevibacterium spp. rarely cause infections in humans and the related information on this issue is very scarce [1]. The bacteria generally cause infections in immunocompromised patients. There have been a few reports about peritonitis due to *Brevibacterium* spp [1-3]. Here we present a case where *Brevibacterium* spp were found to be the infective pathogen in the peritoneal dialysate.

A 28-year-old man, who had been receiving continuous ambulatory peritoneal dialysis (CAPD) therapy for ten years because of end-stage renal disease of unknown origin, presented with nausea, vomiting, abdominal pain, fever, diarrhea, and cloudy dialysate for one day.

The exit site and the tunnel of the CAPD catheter were found to be normal. The dialysate effluent was cloudy. The white cell count (WBC) of the peritoneal fluid was 460/mm³ with neutrophile predominance. Gram positive bacilli were seen on gram stain. After microbiological evaluation, the patient was empirically given an antibiotic regimen consisting of intraperitoneal cephazolin and amikacin. The third day of the initiation of therapy, WBC of the dialysate effluent decreased to 10/mm³. No organism was isolated from blood cultures. *Brevibacterium* spp. was isolated from the dialysate effluent. The empiric antibiotic therapy was switched to intraperitoneal ampicillin/sulbactam at 2 g dosage every 12 hours. The therapy continued for 15 days. The Tenchoff catheter was not removed. The patient has since remained free of peritonitis for three months.

Although the *Brevibacterium* spp. rarely cause infections, there have been cases of CAPD peritonitis due to *Brevibacterium* spp. reported in the literature [1-4]. As

it is a susceptible pathogen to standard antibiotic treatment, there was no need to remove the CAPD catheter. The source of peritoneal infection in our patient was not determined and, unfortunately, we did not look for *Brevibacterium* on the patient's skin. *Brevibacterium* spp. has been found to be associated with hypersensitivity reactions, but we did not observe any cutaneous reactions like erythematous rash or urticaria in our patient. In conclusion, a careful search should be made to identify the source of the infection because it is a susceptible pathogen to standard antibiotic treatment. PD-related peritonitis caused by *Brevibacterium* spp. can be successfully treated with intraperitoneal antibiotic therapy without removal of the PD catheter.

Conflict of interest statement. None declared

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