Peritoneal Dialysis Peritonitis Caused by *Pseudomonas luteola*

Editor:

Pseudomonas luteola, a gram-negative aerobic bacillus, was originally named *Chryseomonas luteola*, but was reclassified as *Pseudomonas luteola* on the basis of DNA–DNA hybridization (1). It most often found in soil and water as a saprophyte, and in uncommon cases, it causes human infection (2–4). Here, we present a rare case of peritoneal dialysis (PD) peritonitis caused by *P. luteola*.

A 85-year-old man was admitted to our hospital for progressive abdominal pain and persistent fever for 2 days. He had started PD 6 months earlier. His body temperature was 38.2°C, and physical examination of the abdomen revealed lower abdominal tenderness. Laboratory investigations showed a white blood cell count of 12 300/mm³ with 82.6% neutrophils and C-reactive protein 103 mg/L (normal reference: <6 mg/L). Peritoneal effluent was cloudy and had a white blood cell count of 987/mm³ with 82% neutrophils. Empiric treatment with ceftazidime and gentamicin was started intravenously after specimens of blood and peritoneal fluid had been collected for culture.

Five days later, bacterial culture of peritoneal effluent yielded gram-negative bacteria, which were further confirmed as *P. luteola*. Antibiotic susceptibility tests revealed that the organism was sensitive to gentamicin, amikacin, ceftazidime, ciprofloxacin, imipenem, cefepime, piperacillin, and piperacillin–tazobactam. The empiric antibiotics were therefore continued for 10 days, and the patient made an uneventful recovery.

P. luteola has occasionally been reported to cause human infection, including skin and soft-tissue infections,

bacteremia, brain abscess, prosthetic valve endocarditis, and endophthalmitis (1–6). Here, we documented the unusual presentation of *P. luteola*–associated PD peritonitis. This case reminds us that the spectrum of *P. luteola* infections could include PD peritonitis.

Connor *et al.* reported a case of recurrent PD peritonitis caused by *P. luteola* in which the patient's clinical condition did not improve until removal of the catheter (7). In contrast, our patient responded to appropriate antibiotics without removal of the catheter. However, no solid conclusion about the necessity for catheter removal can be made based on these limited experiences.

To summarize, we report a case of PD peritonitis caused by *P. luteola*, and we suggest that *P. luteola* can emerge as a potential cause of PD peritonitis.

DISCLOSURES

The authors have no financial conflicts of interest to declare.

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