A case report of peritoneal dialysis related peritonitis due to melioidosis

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Abstract

Melioidosis is endemic in tropical Australia and Southeast Asian countries. Pneumonia and intraabdominal abscess are the commonest presentation in melioidosis, and rarely peritoneal fluid is the primary source. We reported our first experience handling a case of peritoneal dialysis related peritonitis due to melioidosis in our hospital. A 65-year-old lady with end stage renal disease secondary to diabetic nephropathy started on continuous ambulatory peritoneal dialysis since December 2017 presented with fever for 5 days, abdominal pain and cloudy peritoneal fluids. She was treated as PD peritonitis and immediately started on intraperitoneal (IP) ceftazidime and cephazolin, and subsequently changed to IP meropenem and IP vancomycin due to persistent cloudy peritoneal fluids. Both peritoneal fluids and blood culture showed *Burkholderia pseudomallei*. She was given a combination therapy of intravenous (IV) and IP antibiotics for total 3 weeks duration. The peritoneal cells count was reduced from 480 cells/µl (highest) to 0 cells/µl and she was discharged well with maintenance therapy. However, she was readmitted again 3 days later due to recurrent cloudy peritoneal fluids. Tenckoff catheter was removed and she was commenced on temporary hemodialysis. So far there are limited studies regarding the management of peritoneal dialysis related peritonitis due to melioidosis. There was a case report in Malaysia few years back which successfully salvaged the tenckoff catheter by using IP plus IV antibiotics combination. However, a recent study done by Kanjanabuch et al suggested prompt removal of the catheter once diagnosed as there was higher mortality rate in those retained or delayed catheter removal. In our case we tried to salvage the tenckoff catheter by giving both intravenous and intraperitoneal antibiotics but in vain. Though delayed in catheter removal, our patient survived in this event. Based on the very limited experience and case reports, we suggest prompt removal of tenckoff catheter once peritonitis secondary to melioidosis is diagnosed due to the high possibility of biofilm formation in the catheter.

**Keywords:** Peritoneal dialysis, melioidosis, antibiotics combination

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