Improvement in Peritonitis Rates after Implementation of an Infection Control Protocol Using Electrolytically-Produced Sodium Hypochlorite

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Background: Peritonitis is the most important complication in peritoneal dialysis (PD) patients and the leading cause of PD technique failure. We implemented an infection control initiative whereby electrolytically-produced sodium hypochlorite was used to scrub the transfer set connection before and after a PD system connect/disconnect, as described by Funes (ADC, 2009). We compared peritonitis rates before and after implementation of the protocol to determine its effectiveness in decreasing the incidence of peritonitis.

Methods: Between Jan 2010 and Dec 2010, we assessed monthly peritonitis rates at a large dialysis organization. The initiative was introduced in March 2010.

Results: After implementation of the infection control protocol, peritonitis rates improved steadily from 30.2 months between episodes in March 2010 to 36.8 months between episodes in December 2010. (Figure)

Conclusions: Peritonitis episodes became less frequent in 2010 after the implementation of this protocol. The use of electrolytically-produced sodium hypochlorite is a simple and cost-effective strategy to decrease peritonitis episodes.

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