Implementation of Electrolytically-Produced Sodium Hypochlorite Protocol
Improved Peritonitis Rates

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Objective: Peritonitis has been the leading cause of peritoneal dialysis (PD) technique failure. In an effort to reduce this complication, we implemented an infection control initiative in April 2010 whereby the patient used electrolytically-produced sodium hypochlorite to scrub the transfer set connection before and after a PD system connect or disconnect, as described by Funes et al (Annual Dialysis Conference, 2009). Our objective was to compare peritonitis rates before and after implementation of the electrolytically-produced sodium hypochlorite protocol to determine its effectiveness in decreasing the incidence of peritonitis.

Methods: We assessed 3-month rolling peritonitis rates at a large dialysis organization between January 2010 and July 2012. The data represents the results in > 12,000 patients from > 800 facilities. No data were censored, so for instance, hospital-acquired peritonitis was included.

Results: Peritonitis rates improved from 33.3 months between episodes in January 2010 to 44.8 months between episodes in July 2012.

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

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