Decreasing Peritonitis Rate in Peritoneal Dialysis Results in Lower Mortality and Technique Failure

Tracey Milligan, RN, CNN; John Moran, MD, FRACP, FACP; Patrick Cha
DaVita Inc, Denver, CO

Objectives: A simple intervention – using sodium hypochlorite (Alcavis 50) to scrub the connection before and after each connect/disconnect in patients on peritoneal dialysis (PD) introduced in April 2010 - has led to a marked decrease in peritonitis rates. We report here the resulting decrease in mortality and in technique failure.

Methods: In a retrospective analysis of > 12,000 patients, we calculated the technique failure rate on a rolling 12 month basis as (total losses in past 12 months)/(average census of month 1 and month 12). The data was censored only for transplants. Dialysis units reported the reasons for PD patient losses monthly at facility management meetings using a standard list.

Results: The technique failure rate has decreased from 40.0% in January 2009 to 32.9% in July 2012, a decrease of 17.8%. This decrease is largely explained by a decrease in technique failure due to peritonitis from 5.4% to 3.1% (43% decrease) and a decrease in mortality from 11.0% to 9.6% (13% decrease).

Conclusions: The decrease in peritonitis has been reflected in a major improvement in technique survival and in mortality.

Abstract selected for presentation at ANNA's 44th National Symposium, Las Vegas, NV, 2013