

9th International Conference on**Nephrology: Kidney & Therapeutics**

September 29-30, 2016 Orlando, USA

Incidence of peritonitis, causative organism, catheter and patient outcome: Single center experienceAyman Aly Seddik^{1,2}, Amna Khalifa Alhadari², Fakhria Al Alawy² and Abdelrahman Khedr¹¹Ain Shams University, Egypt²Dubai Hospital-DHA, UAE

Introduction: Peritonitis in the peritoneal dialysis (PD) patient is defined by the International Society for Peritoneal Dialysis (ISPD) as the presence of two of the following three criteria: (1) signs and symptoms such as fever, abdominal pain/tenderness; (2) >100 white blood cells/mL dialysate fluid, of which >50% are neutrophils; and (3) identification of the organism in the PD fluid (1). Peritonitis still represents the main acute complication of peritoneal dialysis (PD) and is a leading cause of hospitalization catheter loss, and technique failure (2).

Patients & Methods: Quantitative approach, retrospective study was done. We analyzed a database of patients from the Nephrology Service at Dubai Hospital, Dubai Health Authority from January 1999 till December 2012. The analysis included patients in PD for more than 3 months and with complete information. We collected data regarding the catheter and patient outcome following recorded peritonitis episodes. The rate of peritonitis was expressed as risk of a peritonitis episode per year (ep./year) and calculated in accordance with the ISPD recommendations.

Results: 54 patients were studied for over 13 years. 29 were female patients (56%) and 23 were male patients (44%). Higher number of patients in 40-60 and >60 years group was 46.2% & 36.5%, respectively. the calculated peritonitis episode per patient year, where total peritonitis episodes were 0.408 episodes per patient year with highest recorded for gram positive organism in patient culture 0.132, followed by culture negative 0.126 episodes per patient year and the lowest incidence found for fungal infection 0.024 episodes per patient year. Prevalence of causative organism as per culture results: The highest was for gram positive organisms and culture negative episodes 35.3% and 30.7%, respectively. Outcome of catheter post peritonitis episodes: We found that the episodes resulted in catheter removal in 54 episodes (35.3%) and catheters were salvaged in 99 episodes (64.7%). Patients continued on peritoneal dialysis following peritonitis episodes in 90 (58.8%), while 32 episodes needed temporary hemodialysis (HD), permanent HD in 24 episodes (15.7%) and mortality was reported in 7 episodes (4.6%).

Discussion: This study provides an overview of the incidence of peritonitis and the microbiological profile of a single PD center in Dubai, UAE. The incidence of peritonitis per patient year shown in our study 0.408 episode per patient year (almost one episode every 26 patient months) which comes in accordance with the 2005 recommendations from the International Society of Peritoneal Dialysis (ISPD), recommending that the unit should have as a goal a rate not exceeding one episode every 18 months, or 0.67 ep./year (1).

Conclusion: we may conclude that the rate of peritonitis episodes per patient year of the patients studied is within the minimum recommended by the guidelines, but short of the latest goals were achieved. In some centers we observed that there was an improvement over the last few years, which we attribute to the improvement in training and retraining of patient and care giver enrolled in the program, staff continuous education, assignment of dedicated peritoneal dialysis nurses, higher rate of using automated peritoneal dialysis machines and the structured follow up of our patients with monthly peritoneal dialysis clinic follow up. This data reinforces the importance of training and constant monitoring for the improvement of services, with a consequent emphasis on patient safety.

Biography

Ayman Aly Seddik graduated from Ain Shams University School of Medicine in 1996 with honors, and completed internship and residency program in Internal Medicine and Nephrology during 1997-2001. He worked as Assistant Lecturer and Nephrology Specialist in Ain Shams University Hospital, and Nasser Institute for Research during 2001-2006. After obtaining MD degree in Internal Medicine & Nephrology in 2006 from Ain Shams University, he worked as Consultant Nephrologist and Lecturer in Ain Shams University Hospital, Senior Specialist Nephrologist in King Fahad Armed Force Hospital, Jeddah Saudi Arabia (2006-2008), Consultant Nephrologist in Northern area Armed Force Hospital (2009-2011), and Program Director of Internal Medicine Residency Program in Northern area Armed Force Hospital. He also worked as Assistant Professor of Internal Medicine and Nephrology at Ain Shams University, Cairo, Egypt in 2012. Currently, he is working as Nephrologist, Dubai Hospital - Dubai Health Authority from 2011 till date.

Seddik500@gmail.com