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Session Name : KSN-ISPDP Joint Symposium

Session Topic : Increasing PD Uptake and Improving PD Outcomes

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## **Improving PD Outcomes: Applying the New ISPD Infection Guidelines**

**Adrian Liew**

*Mount Elizabeth Novena Hospital, Singapore*

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Peritoneal dialysis (PD) is an essential modality for patients with kidney failure, offering greater patient autonomy, improved quality of life, preservation of residual kidney function and better initial survival. However, infection remains one of the most significant complications in PD patients, with peritonitis being the most common and serious infectious complication. The International Society for Peritoneal Dialysis (ISPD) regularly updates its guidelines to improve patient outcomes, and the latest revisions focus on enhancing infection prevention, diagnosis, and management. This lecture will explore the new ISPD infection guidelines, emphasizing their practical application in clinical settings to improve PD outcomes. The ISPD's updated infection guidelines are based on evolving research and evidence that addresses both the prevention and treatment of PD-associated infections, particularly peritonitis and exit-site infections (ESIs). Central to these guidelines is the implementation of comprehensive infection prevention strategies, including improved patient education, optimal catheter care, and antimicrobial prophylaxis. The guidelines underscore the importance of training both patients and caregivers in aseptic techniques to prevent infections at the peritoneal catheter insertion site and the exit site. Emphasis will be placed on the significance of early recognition of symptoms, as timely intervention is crucial in reducing the severity of infections and preventing PD failure. In addition to preventive measures, the updated guidelines provide new recommendations on the diagnosis and management of peritonitis. This includes the use of rapid diagnostic tools such as microbial cultures, as well as the role of biomarkers in differentiating between sterile and infectious peritonitis. The lecture will examine the importance of appropriate antimicrobial therapy, specifically targeting the most common pathogens, and the role of tailored treatments based on microbiological results. With increasing rates of multidrug-resistant organisms, the application of personalized treatment regimens, as outlined in the guidelines, is becoming increasingly vital. Another key focus of the guidelines is the management of exit-site and tunnel infections (ESTIs), which, if left

untreated, can lead to more severe complications, including peritonitis and catheter loss. The lecture will delve into the recommended use of topical and systemic treatments and highlight the importance of regular monitoring of catheter sites. The guidelines also discuss preventive strategies such as the use of prophylactic antibiotics and proper catheter dressing techniques. Lastly, the lecture will explore the multidisciplinary approach recommended by the ISPD guidelines, stressing the involvement of nephrologists, dialysis nurses, infection control specialists, and patients in the prevention and management of infections. By fostering collaboration and ensuring consistent adherence to evidence-based practices, the updated infection guidelines aim to reduce the incidence of infection-related complications, thereby improving PD patient outcomes, reducing hospitalization rates, and enhancing overall quality of life. In conclusion, the new ISPD infection guidelines provide a comprehensive and evidence-based framework for managing infections in PD patients. This lecture will equip healthcare professionals with the knowledge and tools to effectively apply these guidelines, ultimately improving patient outcomes and enhancing the safety and effectiveness of peritoneal dialysis therapy.

**Keywords:** Peritoneal Dialysis, Peritonitis, Technique Failure, Patient Survival, Exit Site Infection