

Peritoneal dialysis-related infections in Malta over the last four years

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A major factor contributing to morbidity and mortality in peritoneal dialysis (PD) patients is infection. We describe an overview of PD peritonitis and catheter-related infections (CRI) in Malta over a period of four years. ISPD Guidelines were used to define peritonitis, CRI and rates. Microbiological data was analyzed. The prevalence of patients undergoing PD during 2013-2016 was 91, 80, 126 and 117 respectively; patient-years at risk were 85.80, 85.25, 89.71, and 83.7 respectively. PD peritonitis rates were 0.57, 0.54, 0.43 and 0.39 episodes/patients in 2013, 2014, 2015 and 2016 respectively. There was a reduction of coagulase-negative *Staphylococcus* (CNS) peritonitis from 0.26 in 2013 to 0.11 episodes/patients in 2016. Methicillin-resistant *S. aureus* (MRSA) peritonitis decreased from 0.01 episodes/patients in 2013 to nil in 2016. Among the G-negative peritonitis, *Escherichia coli* and *Pseudomonas* predominated in 2013. In 2016, *Enterobacter* and *Klebsiella* were predominant at 0.01 episodes/patients with no *Pseudomonas* peritonitis. Fungal peritonitis rate was 0.01, 0.02, 0.02, nil episodes/year respectively. CRI rates were 0.35, 0.91, 0.37 and 0.38 episodes/patients respectively. There was a higher incidence of recurrent infections in 2014 but none in 2016. G-negative organisms accounted for 54% of all CRI predominantly *Pseudomonas aeruginosa* at 0.06, 0.09, 0.09 and 0.14 episodes/patients/years, respectively. G-positive CRI were mostly due to *Staphylococcus aureus*, whereas MRSA rates were 0.02, 0.15, 0.04 and 0.03 episodes/patient year respectively. Our study showed a marked improvement in PD peritonitis rate. This was due to an active inter-disciplinary approach between the Nephrology and Infection Control departments.

Biography

Maria Angela Grima completed her Graduation in Medicine and Surgery at University of Malta in 2015 and is a foundation Doctor at Mater Dei Hospital. She has participated in various studies and audits, most of which have been published or presented at Malta Medical School Conference, Foundation Program Audit Day in Malta and UK, the 12th and 13th Maltese Infection Control Conference, European League against Rheumatism Congress and Joining Forces in Cancer Care Conference. She is also participating in the development of a clinical guideline at Mater Dei Hospital.

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