



Short term clinical outcome of Peritoneal dialysis patients at Vila Central Hospital: A Retrospective Cohort study.

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Abstract text

Background: Peritoneal dialysis (PD) is a renal replacement therapy that infuses a sterile solution into the peritoneal cavity and uses the peritoneal membrane as the exchange surface to remove waste products. Prior to 2020, patients requiring dialysis were sent overseas. However, due to border closures in response to COVID-19 in 2020, overseas referral was not possible. A trained local urologist initiated in country PD for those that required urgent PD. The purpose of this study is to evaluate the clinical outcome and complications of PD within three months.

Methods: This is a retrospective cohort study examining PD cases at VCH. The medical records of all patients who had PD inserted from 01/01/2021-10/7/2023 were collected. The follow up time period was three months after insertion. Data were collected and analyzed focusing on the demographics, co-morbidities, and clinical outcomes. Clinical outcomes were measured by recorded fluid overload status and creatinine levels.

Results: 12 PD were performed in Vanuatu since 2021. Data was available for 10 cases. 80% of cases were Male, mean age 57 years. Outcome data is pending for three cases. Average length of admission after insertion was 24 days. Creatinine clearance within two days of PD decreased by 10% and 67% had improvement in their fluid overload status. 67% developed electrolyte imbalances. Four died within 3 months; two died during their first admission and two died during readmission with complications of Peritonitis.

Discussion: Initiating PD in ESKD patients showed an improvement in kidney function and decrease in fluid status. However, there was a high mortality rate for the first and second admissions. Comparison to overseas mortality rates following PD is recommended to accurately assess the impact of PD introduction in Vanuatu. PD may be best suited as a tool for stabilizing patients prior to referral overseas for specialist service.