

# OUTCOME OF PERITONEAL DIALYSIS (PD) IN CRITICALLY ILL PATIENTS AS AN ALTERNATIVE TO INTERMITTENT HEMODIALYSIS (IHD) AND SLOW LOW EFFICIENCY DIALYSIS (SLED)

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## Objectives:

Renal replacement therapy (RRT) is often required among critically ill patients in intensive care units (ICU) for the treatment of acute as well as chronic renal failure.

Different modalities of continuous therapies (CRRT) are not always available.

Peritoneal dialysis (PD) is an option when intermittent hemodialysis or slow dialysis (SLED) is not possible.

In this observation outcome of continuous PD modality in a compromised group of renal insufficiency patients was explored.

## Methods:

Patients who failed to tolerate IHD and SLED due to hemodynamic instability and those who required dialysis for a prolonged period were selected.

These patients were on various life-support modalities having multiple co-morbid conditions; fluid overload, electrolyte disturbances and on different nephrotoxic drugs.

A Tenckhoff double cuff straight catheter was introduced by mini-laparotomy for PD.

Vancomycin and amikacin were used as prophylactic antibiotics per operatively.

Regular exchanges were started manually with small volume on the day or the next day initially with 0.5-1 liter/session and subsequently with 2 liters after 15 days.

## Results:

In 47 cases PD catheter was introduced

Post operative mechanical complications were very low with negligible infection rate.

Their age was  $64 \pm 20$  years and 62% were male. Majority were diabetic (83%)

The indications of RRT were sepsis (63%), acute cardiovascular insufficiency (AMI & NSTEMI 15%), stroke (6%), gastroenteritis (4%) and in rest multi organ failure (12%).

In ICU 46% expired within a short period.

In the others 53% survived beyond 1 month; 34% beyond 3 months; 21% beyond 6 months and 8% beyond 1 year.

## Conclusions:

Peritoneal dialysis (PD) can be an alternate mode of renal replacement therapy (RRT) in ill patients where intermittent hemodialysis (IHD) or slow dialysis (SLED) therapy is failed.

It was accompanied with low risk of procedure related complications and tolerated well.

Poorer outcomes are likely to be dependent on underlying co-morbidities.

