

# Different prescribed doses of high volume peritoneal dialysis and outcome of patients with acute kidney injury

**Submission date**  
08/05/2010

**Recruitment status**  
No longer recruiting

☐ Prospectively registered

☐ Protocol

**Registration date**  
20/05/2010

**Overall study status**  
Completed

☐ Statistical analysis plan

☒ Results

**Last Edited**  
20/05/2010

**Condition category**  
Urological and Genital Diseases

☐ Individual participant data

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

Prof Daniela Ponce

### Contact details

Distrito de Rubiao Junior (without number)  
Botucatu  
Brazil  
18600000

## Additional identifiers

### Protocol serial number

N/A

## Study information

### Scientific Title

Different prescribed doses of high volume peritoneal dialysis and outcome of patients with acute kidney injury: a randomised controlled trial

### Study objectives

Patients with acute kidney injury (AKI) treated with higher intensity of Peritoneal Dialysis (PD) presented lower mortality rate and better metabolic control.

**Further reading:**

Gabriel DP, Nascimento GVR, Caramori JT et al. Peritoneal dialysis in acute renal failure. Ren Fail 28: 451456. 2006 (Review)  
<http://www.ncbi.nlm.nih.gov/pubmed/16928612>

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

The local research ethics committee (Comitê de Ética em Pesquisa) approved on the 14th of September 2004 (ref: FMB 2004,112)

**Study design**

Randomised active controlled parallel group trial

**Primary study design**

Interventional

**Study type(s)**

Treatment

**Health condition(s) or problem(s) studied**

Acute Kidney Injury

**Interventions**

We randomly assigned critically ill patients with AKI to receive higher or lower intensity PD therapy. A PD session was defined as 24 h of dialysis with sessions performed 7 days per week. Peritoneal access was established by percutaneous placement of a flexible catheter (Tenckhoff) by a nephrologist. The patients in both groups were treated with continuous and automated. Prescribed and delivered PD dose was determined by the formula urea Kt/V (18) as proposed by Gabriel et al (1,2). The prescribed Kt/V value was 0.8 per session for the higher intensity group or 0.5 per session for the lower intensity group.

**Intervention Type**

Other

**Phase**

Not Applicable

**Primary outcome(s)**

Death within 30 days

**Key secondary outcome(s)**

1. Recovery of kidney function within 30 days
2. Metabolic control

**Completion date**

01/01/2007

# Eligibility

## Key inclusion criteria

1. Adults with Acute Kidney Injury (AKI) according to Acute Kidney Injury Network (AKIN) criteria
2. Clinical diagnosis of severe acute tubular necrosis (ATN) caused by a recent ischemic or nephrotoxic injury. Severe ATN was defined as a history of prolonged and profound hypotension, severe nephrotoxic drugs overdose, or excess endogenous nephrotoxic pigments (hemoglobinuria, myoglobinuria). Diagnosis was based on clinical history, results of physical examination, relevant blood tests, and urinalysis (microscopical examination of urinary sediment), a fractional excretion of sodium that exceeded 1% and the findings on renal ultrasonography.

## Participant type(s)

Patient

## Healthy volunteers allowed

No

## Age group

Adult

## Sex

All

## Key exclusion criteria

1. Under 18 years of age
2. Functional azotemia
3. Urinary tract obstruction
4. Acute interstitial nephritis
5. Rapidly progressive glomerulonephritis
6. History of chronic renal insufficiency (serum creatinine 43mg per 100 ml)
7. Renal transplantation
8. Pregnancy
9. Severe hypercatabolism according to Scherier criteria
10. Absolute contraindication for PD were recent abdominal surgery (less than one month)
11. Multiple abdominal surgeries (more than three)
12. Patients submitted to less than one session of high volume PD (HVPD), defined as 24 h.

## Date of first enrolment

01/01/2005

## Date of final enrolment

01/01/2007

# Locations

## Countries of recruitment

Brazil

**Study participating centre**  
Distrito de Rubiao Junior (without number)  
Botucatu  
Brazil  
18600000

## Sponsor information

**Organisation**  
São Paulo State University (Universidade Estadual Paulista [UNESP]) (Brazil)  
  
**ROR**  
<https://ror.org/00987cb86>

## Funder(s)

**Funder type**  
University/education

**Funder Name**  
São Paulo State University (Universidade Estadual Paulista [UNESP]) (Brazil) - Departmental funding

## Results and Publications

Individual participant data (IPD) sharing plan

**IPD sharing plan summary**  
Not provided at time of registration

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	01/05/2007		Yes	No
<a href="#">Results article</a>	results	01/04/2008		Yes	No
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes