Average weight was 57.1 Kg (range 39 – 69; S.D. 6.9) and average urea distribution volume (V) was 29.28 (range 21.7- 40.98; S.D. 3.44). We included 48 patients with Qd 500 mL/min and 23 with Qd 400 mL/min (67.6% and 32.3% respectively).

There were 36 withdrawals: 13 patients died (18.3%), 12 patients (16.9%) changed to PD, 6 recovered renal function (8.45%), 1 (4.23%) was lost from RTS network and lost for follow up and 2 patients (2.85%) received renal transplantation.

The main cause of death was cardiovascular: 53.8% (7 patients: myocardial infarction, congestive heart failure, cerebrovascular event), 5 patients (38.4%) died because of sepsis and one patient died by cancer (7.6%).

Annual mortality rate in our population was 16.6%. Bivariate analysis at two year of follow up was not statistically different (p=0.427) between Qd 400 mL/min and 500 mL/min. A Kaplan Meier analysis at two year of follow up was not statistically different. 5 patients (38.4%) died because of sepsis and one patient died by cancer (7.6%).

There were no differences in Kt/V, phosphate, calcium and parathyroid hormone (PTH) between Qd 400 vs 500 mL/min.

There was no statistically significant difference between Qd with outcome of mortality adjusted to age, gender, hemoglobin, serum phosphate, PTH, diabetes mellitus, hypertension, vascular Access and time in dialysis. Table 1.

Table 1. Adjusted HR for mortality vs clinical variables (n=71)

<table>
<thead>
<tr>
<th></th>
<th>HR</th>
<th>IC 95%</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male gender</td>
<td>1.44</td>
<td>0.4-43</td>
<td>0.53</td>
</tr>
<tr>
<td>Age</td>
<td>0.93</td>
<td>0.9-3.1</td>
<td>0.04</td>
</tr>
<tr>
<td>Body weight</td>
<td>0.95</td>
<td>0.87-1.02</td>
<td>0.21</td>
</tr>
<tr>
<td>Kt/V</td>
<td>0.76</td>
<td>0.16-3.7</td>
<td>0.76</td>
</tr>
<tr>
<td>Hemoglobin</td>
<td>0.79</td>
<td>0.59-1.05</td>
<td>0.11</td>
</tr>
<tr>
<td>Phosphate</td>
<td>1.03</td>
<td>0.62-1.72</td>
<td>0.87</td>
</tr>
<tr>
<td>Albumin</td>
<td>0.42</td>
<td>0.18-0.95</td>
<td>0.038</td>
</tr>
<tr>
<td>PTH</td>
<td>0.99</td>
<td>0.99-1.3</td>
<td>0.69</td>
</tr>
</tbody>
</table>

Conclusions: The lowering of Qd in patients receiving chronic maintenance HD with high efficiency membranes allows an adequate dose of dialysis without effects on mortality, but with interesting savings of potable water: 24 Liters were saved in each session per patient. Our calculated 5 years spare of water data is presented in Table 2.

When extrapolating our results to 100 patients, reduction of Qd would result in an annual saving of 345,600 L of water, that is remarkable compared to WHO minimum for basic health protection of at least 20 L per person/day: our saving equals the minimal amount of water for 1 adult for 47 years.

We present our results as part of the Blue Planet dialysis initiatives to reduce the ecological impact of renal replacement therapies and to present HD as an affordable therapy in places with scarcity of water.

**SAT-343**

**PROGRESS TOWARDS ENVIRONMENTALLY SUSTAINABLE RENAL CARE IN AUSTRALIA AND NEW ZEALAND**

Barraclough, K*,1 Knight, J,2 Sypek, M1 Agar, J3

1Royal Melbourne Hospital, Nephrology, Parkville, Australia, 2University of New South Wales, The George Institute for Global Health, Sydney, Australia, 3Barwon Health, Nephrology, Geelong, Australia

**Introduction:** The healthcare industry, together with its supply chain, contributes significantly to greenhouse gas emissions and natural resource depletion. Dialysis programs have a particularly large carbon footprint, with a recurrent, per capita resource consumption and waste generation profile that is second to none in healthcare. Recognising this, and the need for change, the Australia New Zealand Society of Nephrology (ANZSN), in partnership with the Renal Society of Australia (RSA; the peak Australasian body for renal nursing and related allied health professionals) and Kidney Health Australia (KHA; the Australian body for consumers and carers), convened a working group in early 2017 to promote and support a transformation to environmentally sustainable care in Australia and New Zealand.

**Methods:** Expressions of interest were sought from environmental sustainability-passionate clinicians, nurses, administrators, and consumers in Australia and New Zealand. This resulted in the formation of the Green Nephrology Action Team (GNAT), whose membership includes 4 nephrologists, a renal technician, two renal nurses, a representative from KHA and a consumer.

**Results:** GNAT has developed a position statement on environmental sustainability and renal care which can be viewed on the ANZSN website. GNAT’s primary focus to date has been on raising awareness within the ANZ renal community about the environmental problems related to dialysis, because willingness to solve them can come only after there is realisation that they exist. To this end, an environmental symposium and workshop were held at the 2018 ANZSN and RSA annual meetings, respectively, and social media platforms for posting/discussing ideas are slowly building. A draft ‘Green Dialysis’ website (which improves, updates and expands an existing website - www.greendialysis.org) is near completion - this aims to serve as a resource for all those in the renal community keen to address the environmental impact of their own practice. Recognising the need for a strong evidence base to guide practice change, GNAT has also developed a list of ‘green’ research priorities and funded two Environmental Research Prizes, one each for RSA and ANZSN, which were awarded for the first time at the 2018 RSA and ANZSN annual meetings.

**Conclusions:** Climate change, resource consumption and waste management are issues that impact us all. As a nephrology community, we have a responsibility to minimise the adverse effects of our own practice and to promote a safe and healthy environment for the sake of our patients and the broader global community. GNAT seeks to encourage the Australia and New Zealand nephrology community to adopt resource conservation measures and environmental sensitivities, and to show other nephrology communities and healthcare sectors how to do the same.

**POSTER SESSION: PODOCYTES, MESANGIAL CELLS AND GLOMERULAR FUNCTION**

POS27
14/04/2019
Exhibition hall (Doors 7 & 8)
12:00–13:15

**SUN-001**

**A NEURO-RENAL SYNDROME WITH NEUROFASCIIN ANTIBODIES**

BUKHARI, S*1, Cathro, H2, Solorzano, G3, Gwathmey, K4, Bowman, B1

1Royal Melbourne Hospital, Nephrology, Parkville, Australia, 2University of New South Wales, The George Institute for Global Health, Sydney, Australia, 3Barwon Health, Nephrology, Geelong, Australia

**Expression:** A novel autoimmune kidney disease syndrome has been described in a child with neurofibromatosis (NF 1) and subacute renal impairment.

**Methods:** A 13-year-old boy with NF 1 was referred to our nephrology service with acute renal failure. Kidney biopsies revealed an immune complex mediated mesangial proliferative glomerulonephritis. Antibodies to neurofascin, a cell adhesion molecule expressed on astrocytes, were found.

**Results:** The child was treated with immunosuppression and has subsequently made a good recovery.

**Discussion:** This report highlights a hitherto unrecognised renal complication of NF 1.