



Peritoneal dialysis outcomes of Aboriginal and Torres Strait Islander patients of remote Kimberley origin



Why was this study done?

- If your kidneys fail you might be put on the machine (haemodialysis), on the bags (peritoneal dialysis), or receive a new kidney (transplantation).
- 7 out of 10 patients coming from the Kimberley are put on the bags (PD) early in their treatment. Clinic staff thought that abdominal infections (peritonitis) were common in Kimberley patients and that they did not stay on the bags for very long.
- We wanted to see how well Kimberley Aboriginal and Torres Strait Islander patients who were on the bags did compared with other Aboriginal and Torres Strait Islander patients and non-Indigenous patients during 2003-2010.

How was this study done?

- With the help of health workers from the Kimberley Aboriginal Medical Services Council and Royal Perth Hospital we identified Aboriginal and Torres Strait Islander patients who originally came from the Kimberley region and who were put on the bags. They also collected information on when they had abdominal infections.
- We also received information about people on the bags (no names were included in any reports):
 - treatment outcomes,
 - other medical problems they had,
 - how old they were when they got kidney disease,
 - when they first started PD and had peritonitis,
 - how many had died.



On the bags
(PD)



On the machine
(HD)

What were the results?

Kimberley patients compared to non-Indigenous patients:

- Were more likely to be younger, female, and have other medical problems (eg diabetes) when they started dialysis.
- Had their first episode of abdominal infection much earlier (11.2 v 21.5 months).
- Were nearly twice as likely to stop PD and go on the machine.

Kimberley patients compared to other Aboriginal and Torres Strait Islander patients:

- Were 1.5 times more likely to stop PD and go on the machine.
- Had nearly double the number of abdominal infections (2.0 v 1.15 each patient-year).
- Spent a similar amount of time in total on PD (16.8 v 16.4 months).
- Appear to have worse outcomes than our earlier study (2003-2007) of Kimberley haemodialysis (HD) patients. This raises concerns that the death rate may be worse on PD than HD for Kimberley patients.

What does this mean?

- PD continues to be a useful therapy to return people to their homes, however the demonstrated increased illness and a possible increase in deaths sounds a warning note.
- As a result of this study, doctors have been more cautious in selecting Kimberley people who would benefit from starting on PD in the Kimberley and less people are on PD than there used to be.
- Although PD can bring Kimberley patients closer to home, it is often only a short term treatment and patients can become quite ill on PD.
- The risks and possibly short term nature of PD need to be carefully explained to patients in remote areas so they can consider all options before opting for PD.
- Other options are expanding, with satellite HD now available in four Kimberley towns and home HD also possible in a number of places.

Many thanks to all the staff who provided data for this study. Without your help this research would not have been possible.

This study was a joint project between the Kimberley Aboriginal Medical Services Council, The Rural Clinical School of Western Australia and Royal Perth Hospital.

A report on this study has been published by the Australian Journal of Rural Health: Marley JV, Moore S, Fitzclarence C, Warr K, and Atkinson D. Peritoneal dialysis outcomes of Indigenous Australian patients of remote Kimberley origin. Aust J Rural Health 2014; 22:101-108.

If you have any questions or comments please direct them to Associate Professor Julia Marley by email (Julia.Marley@rcswa.edu.au) or phone (08) 9194 3200.