

Acceptance onto dialysis guidelines: St George Hospital

The following information is a guideline to support clinicians in decision making regarding acceptance onto dialysis.

A review of international guidelines has identified that the most current are the CARI Guidelines <http://www.cari.org.au/guidelines.php>

Summary of information in this document

- Pre-emptive transplant should be considered
- Home therapies remain the most suitable form of dialysis therapy
- Hospital dialysis should be last option
- Pre-dialysis education when eGFR <20ml/min and considering RRTs
- Referral to vascular access nurse should be initiated at GFR 15
- Conservative pathway where appropriate after discussion with patient/family/nephrologist.
- Referral to Renal Supportive Care (RSC) once decision made to be conservative, or when the patient is ready and referred by nephrologist.
- Survival on dialysis is poor for elderly patients with high burden of comorbidities.
- Conservative patients are managed actively by nephrologist with adjuvant care from the RSC team. The GP must be well informed and involved in the care.

Treatment options

1. **Pre-emptive transplant** should be considered thus averting the need for dialysis at all. Work up should commence around eGFR 15.

Does the patient have a willing donor?

Education on transplantation can be provided by the transplant coordinators.

2. **Dialysis**

Literature suggests that home therapies are the best and should be supported where possible. The following supportive advice should be used in discussions with patients and family.

Home therapies:

- Promote independence with a chronic life long treatment
- Permit flexibility with days or hours for dialysis treatments

- Can be done while asleep, leaving the days free for work, school and play.
- Support more dialysis leading to better outcomes, less restricted diet, less medications
- Promote better rehabilitation and return to work.
- Make holidays easier to organise, especially automated peritoneal dialysis (APD)
- Overcome transport issues
- Do not require people to come to hospital where there are delays, rigid routines and very sick people with high risk of cross infection
- Are less cost to the healthcare system
- Especially home haemodialysis, improve the results for quality of life (QoL).
- Can be done by people from NESB because educational resources are available in different languages
- Come with good follow up support in the home by trained staff
- Can be done by old and frail people
- Can be done by family if patient cannot
- Are good for patients who are remote from hospital
- Allow people to only come to hospital for clinic every 4-8 weeks.

NB that patients for peritoneal dialysis will be required to attend a comprehensive peritoneal dialysis assessment with the PD nurses prior to catheter insertion.

NB Patient for home haemodialysis training will require a referral for a formal interview with Sydney Dialysis Centre when the fistula is viable.

- 3. Hospital/satellite haemodialysis** remains the final option after home dialysis, pre-emptive transplantation have been excluded.

Referral to Predialysis Assessment and Education Clinic

- The aim of the clinic is to provide education and assessment for potential dialysis patients and families to enable informed consent and early identification of preferred and/or appropriate pathway.
- The clinic is multidisciplinary (nursing, dietician, social work)
- Referral to the clinic from consultants and registrars and from clinic and private rooms.
- The criteria are eGFR < 20 and intended dialysis or transplantation.

Referral for vascular access

Referral to vascular access nurse should be initiated at GFR 15 or earlier if problems with access formation are anticipated.

Conservative pathway

If patients are not suitable for home therapy or transplantation they and their doctor should consider whether a **conservative pathway** is appropriate. A conservative pathway means that all active treatments are pursued to maintain an optimum QoL, short of dialysis, and end of life care is planned and carried out with grace and dignity. It should be stressed that these patients are still reviewed in clinic frequently, alternating between nephrology and RSC team reviews.

Referral to Renal Supportive Care service

A referral to the Renal Supportive Care (RSC) clinic should be considered as part of the decision making process as to whether to choose dialysis or not for any patient with multiple life-limiting co morbidities where dialysis may not offer any benefit. All patients who choose a conservative pathway should be referred to the RSC for support as indicated. The benefits to early referral are to link patients into the service for the future support with difficult to control symptoms and support at the end of life.

Palliation

Patients who are not dialysis/transplant candidates should be actively managed on the conservative and supportive pathway.

Guidelines

- The nephrologist continues to provide all usual renal care with the exception of dialysis.
- Should be referred to the RSC service early (developing symptoms or considered to be nearing end of life if symptom free)
- GPs are more experienced in palliative medicine and know the resources. They should be kept well informed of the decisions.
- Most patients will ask, "How will I die?" All of us fear dying especially in pain. A simple explanation of the usual process of dying with ESRD will often put the patient at ease.
- Patients will also ask "How long have I got". It should be explained that this is difficult to predict and caution should be given if approximating time (we prefer not to give timeframes).

- Issues such as symptoms to expect as renal function worsens and what can be done to minimise these should be discussed.
- Patients have a choice of where they would like to be in their final days. This can be discussed closer to the time, but preparation is required for a home death especially in regards to access to a home visiting GP. Patients must have had the same GP for approximately 6 months. This GP should be able to do home visits (if not, another GP may need to be sought earlier rather than later) and family should make arrangements with them for who to call out of hours.
- Linking to the local hospice for community palliative care is important.
- If discharging home from hospital for end of life care, please consult with RSC or the palliative care team regarding arrangements for a pack of end of life medications to go home with the family. Plan discharge 2-3 days earlier so arrangements can be adequately made such as delivery of a hospital bed. DO NOT discharge on a Friday.
- As of 2015, an ambulance 'Authorised Adult Palliative Care Plan' should be completed with the family. This form clarifies the care the ambulance provides should they be called to the residence at end of life. This is available from: http://www.slhd.nsw.gov.au/btf/pdfs/Amb/Adult_Palliative_Care_Plan.pdf. The RSC CNC can assist with coordinating these.

Patient survival information

The following information, derived from ANZDATA, can be used to guide physicians in the decision making around whether to pursue dialysis as an option in the frail elderly, particularly when there are a number of co morbidities. As a point of reference, the Australian Bureau of Statistics (ABS) (2012) reports the life expectancy of an 85-year-old male in 2010 to be 6.0 years, female 7.1 years.

Table 1: Patient Survival –1993-2004 Australia for those aged 75 years and over grouped by co morbid condition.

Comorbidity*	Survival % [95% Confidence Interval]				
	No patients	6 months	1 year	3 years	5 years
Chronic Lung Disease	61	82 [70, 90]	77 [64, 86]	47 [33, 59]	22 [11, 35]
Coronary Artery Disease	297	86 [81, 89]	81 [76, 85]	49 [42, 55]	27 [20, 34]
Peripheral Vascular Disease	61	90 [79, 95]	78 [65, 86]	55 [41, 67]	29 [16, 44]
Cerebrovascular	47	93 [81, 98]	80 [64, 89]	47 [31, 62]	27 [11, 45]

Disease					
None	419	92 [88, 94]	86 [82, 89]	55 [50, 61]	32 [26, 38]
More than one	663	82 [79, 85]	71 [68, 75]	35 [31, 39]	18 [14,22]

*Conditions listed are for those who have only that condition. Those with more than one are included in the More than one category.

Thus, a patient over 75 yrs with more than one of these co-morbidities has about a one in three chance of surviving 3 years on dialysis. For some this will be acceptable, for others the intrusion of dialysis and loss of QoL will outweigh this survival time.

Table 2: Patient Survival 2003-2012 Australia (ANZDATA Registry 2014)

Median (25 th and 75 th centiles), years		
Non Diabetic with any vascular disease	75-79 years	4.00 (1.85-6.35)
	80-84 years	2.28 (1.02-4.90)
	85-89 years	2.17 (1.32-3.58)
Diabetic with any vascular disease	75-79 years	3.08 (1.04-5.48)
	80-84 years	2.37 (1.29-4.55)
	85-89 years	1.57 (0.36-6.09)

- With greater attention to diabetes management, particularly if vascular disease is present, survival for diabetics on haemodialysis is now similar to that of non-diabetics, although once >85years of age with diabetes and vascular disease, median survival time is a poor 1.57 years.

Table 3: Patient survival – HD at 90 days censored for transplant 1999 - 2010 Australia grouped by age groups. (ANZDATA 2011)

Survival % [95% Confidence Interval]					
Age Groups	No patients	6 months	1 year	3 years	5 years
0-39 years	2143	98 [97,99]	96 [95, 97]	87 [85, 89]	80 [77, 82]
40-59 years	5824	96 [95, 96]	92 [91,93]	77 [76, 78]	63 [61, 65]
60-74 years	6668	92 [91,93]	85 [84,86]	61 [61, 63]	43 [42, 45]
75 and over	3990	87 [85, 88]	77 [76, 79]	46 [44, 48]	25 [23, 26]

Table 4: Access intervention in previous twelve months – December 2005 Australia for those aged 75 years and over.

	No. Patients	Revision of Access			Declotting of Access		
		AVF	AVG	CVC	AVF	AVG	CVC
Overall	1483	13%	36%	20%	6%	26%	13%
Diabetics*	430	13%	32%	30%	6%	24%	13%

*Includes those for whom diabetes is listed as a comorbidity – not just those for whom diabetes is the primary renal disease.

Summary of tables

20% of patients aged over 75 years who have chronic lung disease, coronary artery disease, cerebrovascular disease or peripheral vascular disease, regardless of diabetic status, do not survive the first year of dialysis. If more than one co-morbid condition exists, survival decreases with about 30% not surviving 1 year.

References

ANZDATA (2011). The 34th Annual ANZDATA Report 2011 - Data to 2010. Chapter 5 Haemodialysis. K. Polkinghorne, H. Dent, A. Gulyani, K. Hurst and S. McDonald.

ANZDATA Registry (2014). 36th Annual Report of the ANZDATA

Australian Bureau of Statistics (ABS). (2012). "2.18 Deaths, Australia - Selected years ", from <http://www.abs.gov.au/ausstats/abs@.nsf/Products/B734713570543C41CA257943000CEF9E?opendocument>.

Mowatt, G., Vale, L. and MacLeod, A. (2004). "Systematic review of the effectiveness of home versus hospital or satellite unit hemodialysis for people with end-stage renal failure." International Journal of Technology Assessment in Health Care **20**(3): 258-268.

Nitsch, D., Steenkamp, R., Tomson, C. R. V., Roderick, P., Ansell, D. and MacGregor, M. S. (2011). "Outcomes in patients on home haemodialysis in England and Wales, 1997-2005: a comparative cohort analysis." Nephrology Dialysis Transplantation **26**(5): 1670-1677.