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ESRD management in elderly patients: towards an individualized patient-centred approach

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Chronic kidney disease (CKD) is a large and growing problem among aging populations. Patients over 65 years of age represent the most rapidly growing segment of the end-stage renal disease (ESRD) population in wealthier countries[1,2], as well as showing a high prevalence of earlier stages of CKD, with relative prevalence equally striking for populations in the USA, Canada and Europe[1,3-5]. One of the major challenges to clinicians caring for older CKD patients expected to progress to ESRD lies in evaluating the overall benefit of offering renal replacement therapy to them. Although survival may have improved over time for older patients initiating dialysis[6], dialysis may be associated with only a limited survival benefit, when comparing to conservative management, as demonstrated by several studies[7,8], with an overall decline in functional status[9],more hospitalization[10], and a poor quality of life. So, among elderly patients with a high burden of comorbidity, conservative management may, therefore, be a therapeutic option, as dialysis is unlikely to prolong or improve quality of life. To offer that option is extremely important to incorporate conservative care pathways into clinical practice, and prioritizes an individualized patient centred model of care.

Brown *et al.*[11] presented data supporting conservative care pathways in an excellent prospective observational study, demonstrated that symptoms can be effectively controlled and that patients experience similar quality of life with or without dialysis. In their programme, patients are seen by both the nephrologist and a palliative care team[11], with specifically but convertible tasks. The palliative care team members manage physical symptoms and psychological issues and help with advance care planning, whereas the nephrology team manages CKD related complications, like anaemia, fluid balance and try to preserve residual renal function.

In this renal supportive care programme, elderly patients with advanced CKD who choose not to do dialysis survived a median of 16 months with a 53% 1-year survival from the time of referral to the programme. Although these patients had a lower survival than younger patients attending the pre-dialysis clinic with a planned future dialysis, there was no significant difference in their adjusted survival compared with a third group of patients who commenced dialysis, during the same period, without attending the pre-dialysis clinic. Moreover, above two thirds of patients in the renal supportive care programme group

achieved improvement in their symptom burden by 6 and 12 months[11].

Conservative management programmes are developing around the world to help care for patients who choose no dialysis therapy. Although the majority of these programmes are still in the beginning are projected to increase over time and may care for an estimated 10% to 20% of the ESRD population[12].

It is essential to increase the training and education of nephrologists in the care of geriatric patients[13], namely in the conservative management of ESRD. They need to be confident in recognizing and managing ESRD related symptoms, to be aware when to refer to palliative care, and they should be comfortable with end-of-life discussions and providing prognostic information to patients, families and caregivers[14].

For evaluating renal replacement therapy benefits and risks and informing patients and their families about ESRD treatment options, there is recently an interest in developing predictive mortality models for incident and prevalent dialysis patients[15-17]. Applying predictive mortality models can be useful, although these models currently fail to address the key question of clinical utility[18], and maybe they are best used to offer information and initiate reflections integrated in a shared decision-making process.

Although these prognostic tools may also help to identify patients at high risk of early death with whom conservative management may be a better option, not all patients starting dialysis with a high score, have a poor prognostic. And it is important to note that a high symptom burden exists in both those patients opting for dialysis and those patients opting for a conservative therapy, as shown by Brown *et al.*[11].

Symptoms, such as chronic pain, fatigue, difficulty sleeping, itchy skin, restless legs, cognitive impairment, and depression are very common in ESRD patients, as evidenced by several studies, often similar to the burden carried by cancer patients[19,20]. Brown *et al.*[11] demonstrated that palliative care teams could reduce the symptom burden in both, dialysis and no dialysis groups.

So, this study draws our attention to the importance to implement an effective collaborative programme with palliative care planning, also for dialysis patients rather than to limit symptom management to those who choose not to do dialysis.

In the management of patients with complex morbidity, as is the case for many ESRD patients, we must incorporate palliative and other supportive interventions to address symptom burden, rehabilitation, and end-of-life care, towards a patient-centred vision of care[21,22].

The nephrology community needs to overcome barriers and move to the implementation and effectiveness of advance care planning programmes, in order to provide the best care for our patients and their families.

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References

1. Saran R, Li Y, Robinson B, *et al.* US Renal Data System 2014 Annual Data Report: Epidemiology of Kidney Disease in the United States. Am J Kidney Dis 2015;66(Suppl 1):S1-S305.
2. Pippias M, Stel VS, Abad Diez JM, *et al.* Renal replacement therapy in Europe: a summary of the 2012 ERA-EDTA Registry Annual Report. Clin Kidney J 2015; 8(3):248–261.
3. Coresh J, Selvin E, Stevens LA, *et al.* Prevalence of chronic kidney disease in the United States. JAMA 2007; 298(17): 2038–2047.
4. Zhang QL, Rothenbacher D. Prevalence of chronic kidney disease in population-based studies: systematic review. BMC Public Health 2008; 8: 117-129.
5. Arora P, Vasa P, Brenner D, *et al.* Prevalence estimates of chronic kidney disease in Canada: results of a nationally representative survey. CMAJ 2013; 185(9): E417–E423.
6. Jassal SV, Trpeski L, Zhu N, Fenton S, Hemmelgarn B. Changes in survival among elderly patients initiating dialysis from 1990 to 1999. CMAJ 2007;177(9):1033–1038.
7. Chandna SM, Da Silva-Gane M, Marshall C, Warwicker P, Greenwood RN, Farrington K. Survival of elderly patients with stage 5 CKD: comparison of conservative management and renal replacement therapy. Nephrol Dial transplant 2011;26(5): 1608–1614.
8. Murtagh FE, Marsh JE, Donohoe P, Ekbal NJ, Sheerin NS, Harris FE. Dialysis or not? A comparative survival study of patients over 75 years with chronic kidney disease stage 5. Nephrol Dial Transplant 2007; 22(7): 1955-1962.
9. Tamura MK, Covinsky KE, Chertow GM, Yaffe K, Landefeld CS, McCulloch CE. Functional status of elderly adults before and after initiation of dialysis. N Engl J Med 2009;361(6): 1539–1547.
10. Carson RC, Juszczak M, Davenport A, Burns A. Is maximum conservative management an equivalent treatment option to dialysis for elderly patients with significant comorbid disease? Clin J Am Soc Nephrol 2009; 4(10): 1611-1619.
11. Brown MA, Collett GK, Josland EA, Foote C, Li Q, Brennan FP. CKD in elderly patients managed without dialysis: survival, symptoms, and quality of life. Clin J Am Soc Nephrol 2015;10 (2):260-268.
12. Swidler MA. Geriatric renal palliative care. J Gerontol A Biol Sci Med Sci 2012; 67(12):1400-1409.

13. Rosner M, Abdel-Rahman E, Williams ME, with the ASN Advisory Group on Geriatric Nephrology. Geriatric nephrology: responding to a growing challenge. Clin J Am Soc Nephrol 2010; 5(5): 936 –942.

14. Phipps L, Walker R. Educational needs in supportive and end of life care. Nephrology (Carlton) 2013; doi: 10.1111/nep.12087.

15. Couchoud C, Labeeuw M, Moranne O, *et al.* with the French Renal Epidemiology and Information Network (REIN) registry. A clinical score to predict 6-month prognosis in elderly patients starting dialysis for end-stage renal disease. Nephrol Dial Transplant 2009; 24(5):1553-1561.

16. Liu J, Huang Z, Gilbertson DT, Foley RN, Collins AJ. An improved comorbidity index for outcome analyses among dialysis patients. Kidney Int 2010; 77(2): 141–151.

17. Bansal N, Katz R, De Boer IH, *et al*. Development and validation of a model to predict 5-year risk of death without ESRD among older adults with CKD. Clin J Am Soc Nephrol 2015;10(3):363-371.

18. Brar R, Tangri N. Predicting death without dialysis in elderly patients with CKD. Clin J Am Soc Nephrol 2015;10(3):341-343.

19. Murtagh FE, Addington-Hall JM, Edmonds PM, *et al.* Symptoms in advanced renal disease. A cross-sectional survey of symptom prevalence in stage 5 chronic kidney disease managed without dialysis. J Palliat Med 2007;10(6): 1266–1276.

20. O'Connor NR, Kumar P: Conservative management of end-stage renal disease without dialysis. A systematic review. J Palliat Med 2012; 15(2): 228–235.

21. Goff SL, Eneanya ND, Feinberg R, *et al.* Advance care planning: A qualitative study of dialysis patients and their families. Clin J Am Soc Nephrol 2015;10(3): 390–400.

22. Vandecasteele SJ, Kurella Tamura M. A patient-centered vision of care for ESRD: Dialysis as a bridging treatment or as a final destination? J Am Soc Nephrol 2014; 25(8): 1647–1651.

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