Review Article

Comprehensive Conservative Care in End-Stage Kidney Disease

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Abstract

In patients with end-stage kidney disease (ESKD), when there maybe situations where dialysis does not offer benefits in terms of survival or health-related quality of life, dialysis should not be viewed as the default therapy. Such patients can be offered comprehensive conservative care as an alternative to dialysis. Conservative (nondialytic) management of ESKD includes careful attention to fluid balance, treatment of anemia, correction of acidosis and hyperkalemia, blood pressure, and calcium/phosphorus metabolism management and dietary modification. Individualized symptom management and supportive care are crucial to maximize the quality of life. We propose that model of comprehensive conservative care in ESKD should manage both diseases as well as provide supportive care. Facilitating implementation of comprehensive conservative care requires coordination between nephrology and palliative care at patient, professional, administrative, and social levels to maximize benefit with the motto to improve the overall quality of life.

Keywords: Conservative care, end-stage kidney disease, palliative care

Introduction

Richard Selzer in his book Mortal lessons – Notes on the art of surgery writes "Delicate durability describes the human body, and nowhere is this more apparent than in the urinary tract. If the liver is all bulk and thunder, the heart fist and thrust and piston, and the brain a foamy paste of insubstantial electricity, the parts of the urinary tract – namely the kidneys, ureters and the bladder are a tracery of tubules and ducts of such a fineness as would lay mad a master plumber, more a Venetian glassblower."

Conventional primary care has been traditionally designed to handle acute conditions consisting of brief clinical encounters to diagnose signs and symptoms, arrange for triage, ensure patient flow, and offer only brief patient education followed by patient-initiated follow-up care. Patients with advanced chronic kidney disease (Stage 4 and 5 chronic kidney disease [CKD]) suffer from high symptom burden and psychosocial issues.[1,2] Wagner threw light into management approaches of chronic illness emphasizing the fact that many are not receiving adequate long-term care.[3] Primary care needs to be redesigned to cope with chronic illnesses with limited treatment options including end-stage kidney disease (ESKD). This requires engaging a broader team that includes links with community care agencies, tracking systems to monitor patient progress, and delegation of the central organizational role from a physician to a case manager.

Although renal replacement therapy including renal transplant and dialysis can prolong and improve the quality of life once a patient reaches ESKD, options may be limited to only dialysis, especially in the elderly with multiple comorbidities. The benefit of dialysis in this population varies between individuals, and randomized studies in this regard are lacking. The existing evidence suggests that the survival advantage of dialysis disappears in patients over 75 years of age with high levels of comorbidity and/or poor functional status.[4,5] The annual mortality of patients on dialysis exceeds 20%. Withdrawal

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from dialysis is a common cause of death for dialysis patients reflecting their poor health-related quality of life (HRQL) or due to nonmedical reasons.[6-9]

When dialysis offers limited benefits in terms of survival or HRQL, it should not be viewed as default therapy. Such patients should be offered the choice of a positive alternative to dialysis, in terms of comprehensive conservative care.[9-11]

Defining Comprehensive Conservative Management

The Renal Physician Association Shared Decision-Making guidelines have previously defined this term as being "active medical management without dialysis."[12]

The ambiguity to defining this relatively new and unknown entity to the nephrology community was addressed to a certain extent with the release of the 2013 KDIGO, *Controversies Conference on Supportive Care in Chronic Kidney Disease: Developing a roadmap to improving quality care,* Executive Summary on Renal Supportive Care.[13]

Definition

"Comprehensive conservative care" is defined as a planned holistic patient-centered care for patients with ESKD that includes the following:[13]

- Interventions to delay the progression of kidney disease and minimize the risk of adverse events or complications
- Shared decision-making
- Active symptom management
- Detailed communication including advance care planning
- Psychological support
- Social and family support
- Cultural and spiritual domains of care.

Conservative (nondialytic) management of ESKD includes careful attention to fluid balance, treatment of anemia, correction of acidosis and hyperkalemia, blood pressure, and calcium/phosphorus metabolism management and dietary modification. Individualized symptom management and palliative care are crucial to maximize the quality of life.[14-16]

Eligibility for Comprehensive Conservative Management

1. When comprehensive conservative care is medically advised or chosen
2. When resource constraints prevent or limit access to renal replacement therapy.

In a country, as large as ours with resource constraints, unequal distribution of health-care programs, it is most often the latter population that "qualify" themselves to receive this care. Depending on how fast or slow the renal function will decline, a framework for addressing the individual's preferences to different options of treatment and prognosis should be made.[17]

Suggestions

We propose the following points in facilitating the implementation of comprehensive conservative care at each level.

Patient specific

1. "Early" nephrologist referral for interventions to delay CKD progression[18]
2. Assessment of patients approaching ESKD for feasibility for dialysis, especially patients who are elderly with multiple comorbidities, especially ischemic heart disease (use of quality of life scoring tools and comorbidity scoring at baseline)
3. Active symptom management to be incorporated into routine care
4. Conservative management should be an important alternative to discuss when counseling patients and families about dialysis
5. Before starting the patient on dialysis, there should be a shared decision-making process on the basis of understanding of prognosis, potential benefits and harms of therapy, and the patient values, goals, and preferences. Comprehensive conservative care should be provided as a viable, quality treatment option for patients who are unlikely to benefit from dialysis
6. Provision for periodic assessment of patients on dialysis and option of dialysis withdrawal with poor functional improvement or quality of life.[19]

Professional

1. A multiprofessional team should deliver comprehensive conservative care consisting of a nephrologist, nurse, social worker/counselor, dietician along with family doctors, community health-care workers, and volunteers. It should be well integrated or liaised with a specialist palliative care team
2. Additional training or expertise in comprehensive conservative care is recommended for all health-care workers involved with renal medicine. Skills that assist with difficult conversations such as sharing bad news, discussing limited prognosis, shared decision-making, supporting them optimally in their therapeutic decisions, and addressing uncertainty and transitions including end of life should be taught.

Administrative/social

1. To strengthen the interdisciplinary participation between renal and palliative medicines in the places where it is existing and to impress the administrative and government authority for the creation of palliative medicine specialty in wherever the renal medicine specialty is existing to improve the quality of management
2. To sensitize nephrology trainees about supportive care
3. Creation of awareness programs on the aspect of end-of-life care in ESKD among caregivers including relatives and the general public.

Scope for research

Further research into conservative care is a priority for the nephrology community. Research priorities must include developing a consensus on comprehensive conservative care so as to have a uniformity in clinical practice and policy making . It should focus on determining the illness trajectory for those managed conservatively, studying the HRQL symptoms/ functional status of patients managed with comprehensive conservative care and determining the cost effectiveness of different models of conservative care across diverse health systems.

Expected Weaknesses/Barriers

Implementation of the recommendations faces the ardent task of overcoming several barriers of supportive care such as inadequate awareness in the medical and administrative groups and the society, conflicting cultural expectations, social norms, and peer pressure issues among professionals among many. It requires close collaboration between the renal team of caregivers, palliative care team with guidance and support from the government and from the national bodies Indian Society of Nephrology and Indian Association of Palliative Care.

Conclusion

Comprehensive supportive care is an alternative to dialysis in a certain group of patients such as the elderly with comorbidities. Such patients should be identified early or after a trial of dialysis using validated tools and offered conservative care. Nephrologists should lead and integrate this service into their practice through liaison with palliative care and community outreach. "Cure sometimes, treat often, comfort always" said Hippocrates. This is where palliative care can make a difference in providing comfort and in facilitating treatment to needy CKD patients. Taking a cue from our understanding, we propose an acronym, CUEPID for the program that we envisage (C – Compassion, U – Understanding, E – Empathy, P – Palliative, I – Integrated, D – Development) in the management of renal patients.

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Conflicts of interest

There are no conflicts of interest.

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