Review Article

Withdrawal from Dialysis: Why and When?

Mohan V Bhojaraja, Pankaj Singhai[1], MM Sunil Kumar[2], M Sreelatha[3]

Department of Nephrology, Kasturba Medical College, Manipal, Manipal Academy of Higher Education, Manipal, Karnataka, India, [1]Department of Palliative Medicine and Supportive Care, Kasturba Medical College, Manipal, Manipal Academy of Higher Education, Manipal, Karnataka, India, [2]Department of Palliative Medicine, Trivandrum Institute of Palliative Science, Thiruvananthapuram, [3]Department of Nephrology, Government Medical College, Kozhikode, Kerala, India

Abstract

Patients with end-stage kidney diseases may request for withdrawal of dialyses for many reasons. Healthcare practitioners frequently puzzled by ethical dilemma of respecting patient's wishes and beneficence of continuing dialysis. Shared decision-making and negotiating goal of care help in decision-making in patients' interests. Proactive identification guidelines that may be used for screening help in weighing options of dialysis and conservative care during progressive decline of clinical condition. Proactive identification guidelines may be used for screening. It helps in weighing options of dialysis versus conservative care during progressive decline of clinical condition. An individualized, patient-centred discussion, rather than disease-oriented, approach may be adapted.

Keywords: Decision-making, dialysis, palliative care, withdrawal

"Whenever the illness is too strong for the available remedies, the physician surely must not expect that it can be overcome by medicine … To attempt futile treatment is to display ignorance that is allied to madness" (Hippocratic Corpus)

Background

Hemodialysis (HD) withdrawal is defined as HD discontinuation after an active decision to permanently stop dialysis by the patient, family, healthcare power of attorney, or healthcare team. However, there are currently no uniformly accepted definitions of withdrawal of dialysis.[1] The practice of withdrawal from dialysis also differs significantly between the countries.[2]

In chronic kidney disease 5Ds, questions arise requesting justification of dialysis treatment in terms of therapeutic benefit versus the burden, increasing disease morbidity, and deteriorating quality of life.[3] In clinical practices, decision to withdraw dialysis therapy arises due to realities such as increasing comorbid conditions, acute medical complications, and increasing logistic burden for family.[4] Patients and families often feel that long-term dialysis treatment is burdensome and express doubts when the quality of life and health of individuals deteriorate.[3] Process for approaching patients about dialysis withdrawal is not standardized, and the conversation can be emotionally difficult for patient, family members, and nephrologists. With shared decision-making which involves basic principles of ethics, e.g. autonomy, beneficence, nonmaleficence, and distributive justice, withdrawal from dialysis is ethically and clinically acceptable.[5]

Table 1: Common reasons for HD withdrawal

Multiple HD access failure
Acute medical complications such as frequent hypotension, severe pain or cramps, life-threatening arrhythmias
Chronic debilitating problems
Chronic failure to thrive/frailty
Logistic and financial reasons (long distance travel, belonged to very poor rural/tribal communities, inadequate family support)

HD: Hemodialysis

Address for correspondence: Dr. Pankaj Singhai, Department of Palliative Medicine and Supportive Care, Kasturba Medical College, Manipal - 576 104, Karnataka, India.
E-mail: doctorpsinghai@gmail.com

Submitted: 26-Feb-21 **Accepted:** 27-Apr-21
Published: 30-May-21

Access this article online

Quick Response Code:

Website: www.jpalliativecare.com

DOI: 10.4103/ijpc.ijpc_66_21

How to cite this article: Bhojaraja MV, Singhai P, Sunil Kumar MM, Sreelatha M. Withdrawal from dialysis: Why and when?. Indian J Palliat Care 2021;27:S30-2.

In a study by Shaikh *et al*., 2018, 64% of patients stopped HD and 17% of patients died while on dialysis. Common reason for dialysis withdrawal is listed in Table 1.[6,7] Dialysis withdrawal has been reported as a leading cause of death in patients on dialysis for chronic renal failure. Death in patients with renal diseases on dialysis has been classified as: [1]

1. Death preceded by dialysis withdrawal (cause of death: renal related/uremia)
   a. Patient choice but not recommended by the treating medical team
   b. Without significant medical problems other than renal failure
   c. Active decision to withdraw from dialysis treatment
   d. Comorbidity – there may not be significant co-morbidity.
2. Death preceded by dialysis withdrawal (other causes of death, i.e. malignant disease, Myocardial Infarction)
   a. Usually, a shared decision of the medical team and patient/family with significant medical problems other than renal failure
   b. Comorbidity score – usually very high, or in a frail elderly patient.
3. Death on dialysis – No dialysis withdrawal
   a. No decision to withdraw from dialysis
   b. Time from last dialysis until death usually <3 days.

Barriers to Introduction of Dialysis Withdrawal Process

For most of patients with end-stage renal disease (ESRD), dialysis is considered standard of care. Family members often feel option of withdrawal as giving up, and it will lead to painful death. Many a time, patients and family members have unrealistic hope of cure from the illness.[7] Physician often finds it difficult to discuss the option of withdrawing from dialysis.[8] In some conditions, ethical dilemmas and legal process make withdrawal decision difficult for the patient [Table 2].

Table 2: Psychosocial and communication barriers

Unawareness of option of supportive care
Nonacceptance of other option
Consider withdrawal as death
Consider withdrawal "giving up"
Fear related to society's acceptance
Unrealistic hope about medical condition and prognosis
Lack of decision-making capacity in patient
Fear of outcome on family
Unaccomplished family needs
Financial burden on family
Fear that withdrawal causes destruction of hope
Health care provide factors
Difficulty in estimating patient's prognosis
Lack of communication regarding patient's wishes
Unrealistic expectations about prognosis
Inability to communicate the option of supportive care
Unavailability of trained palliative care/renal supportive care team
Ethical/legal difficulties to withdrawal
Acute presentations to ED

ED: Emergency department

Screening Tool to Identify Patients in Whom Withdrawal from Dialysis Can be Considered

The gold standard framework proactive identification guidance can be used as a screening tool and to guide the healthcare practitioners for whom withdrawal can be discussed [Table 3].[9] However, withdrawal should be considered only when clinician and team feel that burden of dialysis (nonmaleficence) clearly outweighs the benefit (beneficence). It involves step-wise approach for identification using surprise question, general indicator, and specific indicator for renal diseases.[10]

Table 3: Gold standards framework proactive identification guidance (Principles and materials for the gold standards framework (c) K Thomas, the National GSF Centre 2003-2019. Used with permission from the National GSF Centre in End of Life Care. http://www.goldstandardsframework.org.uk/)

Step 1: The surprise question
"Will you be surprised if the patient dies in the next year, months, weeks, days?"
Step 2: General indicators of increasing dependence or deteriorating health
Generalized deterioration in physical condition, increasing dependence, and needed support for activities of daily living
Multiple unplanned hospital admissions
Advanced CKD with progressive, complicated symptoms
Presence of significant multiple comorbidities
Declining performance status (e.g., Barthel score), unable to do self-care, in bed or chair 50% of day, and increasing dependence in most activities of daily living (Karnofsky performance score ≤50)
Poor response to treatments, decreasing reversibility of disease
Patient's preference for no further active treatment and focus on quality of life (patients autonomy)
Progressive fall in weight (>10%) over the past 6 months
Unanticipated serious event, e.g., frequent/serious fall, death of loved one
Serum albumin <2.5 g/dl
Step 3: Chronic kidney disease stage 4 or 5 with deterioration with at least two of the indicators below
Patient for whom the surprise question is applicable
Repeated unplanned admissions (>3/year)
Patients with poor tolerance of dialysis with change of modality
Patients choosing the 'no dialysis' option (conservative), dialysis withdrawal or not opting for dialysis if transplant has failed
Difficult physical or psychological symptoms that have not responded to specific treatments
Symptomatic renal failure in patients who have chosen not to dialyze nausea and vomiting, anorexia, pruritus, reduced functional status, intractable fluid overload

CKD: Chronic kidney disease

Table 4: Step-wise approach for implementation of withdrawal from dialysis

Identify decision-maker for the patient (patient or family member)
Assess patient's decision-maker's understanding of the patient's clinical situation and benefit versus burden of disease
Provide explanation to the patient/family caregiver for dialysis withdrawal and rationale for it
Reassess the understanding and decision, ensuring consistency in family caregiver
Introducing palliative care services and explaining their scope in the management of the patient
Documentation of decision of withdrawal on medical records and inform primary care physician, nephrologist, and palliative care team
Implementation of withdrawal from dialysis and shifting focus of care to comfort and symptom control of patient and provision of dignified end of life care
Exploring conflict and taking steps toward conflict resolution and review the care process
Provision of bereavement care for the family members

Recommendations for Withdrawal of Dialysis (Kidney Disease: Improving Global Outcomes Guidelines)

In 2015, Kidney Disease: Improving Global Outcomes (KDIGO) developed a roadmap for improving care for patient of ESRD. KDIGO guidelines[11] highlighted the process of introducing conservative care for patients who opts for withdrawal from dialysis. We proposed step-wise approach for withdrawal from dialysis and implementation of end-of-life care pathway[12] [Table 4].

Communication and Implementation of Withdrawal of Dialysis

The communication regarding withdrawal of dialysis treatment can be challenging and stressful for all, patients, family members, and physicians. This discussion should be conducted in appropriate setting and involving all decision-makers for patients. Patient's primary care physicians and palliative care team can also be involved in discussions. During the conversations, patient's and family members' understanding of disease should be assessed and the physician should help the patient or family members in shared decision-making process. The details of discussion must be documented clearly on patient's medical records and should be informed to the people involved in his care.

Conclusion

As the clinical condition of ESRD patients on dialysis deteriorates, with the worsening of performance scores and comorbidity, patient-specific evaluation of burden versus benefit of continuation of HD should be considered by nephrologists. Shared decision-making process with patients and family members will provide opportunity to discuss patient's wishes, goals of care, and option of withdrawal from dialysis to ensure comfort and a dignified, end-of-life care. Palliative care teams should be involved to provide holistic care for the patient.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Murphy E, Germain MJ, Cairns H, Higginson IJ, Murtagh FE. International variation in classification of dialysis withdrawal: A systematic review. Nephrol Dial Transplant 2014;29:625-35.
2. Lambie M, Rayner HC, Bragg-Gresham JL, Pisoni RL, Andreucci VE, Canaud B, *et al.* Starting and withdrawing haemodialysis–Associations between nephrologists' opinions, patient characteristics and practice patterns (data from the dialysis outcomes and practice patterns study). Nephrol Dial Transplant 2006;21:2814-20.
3. Hussain JA, Flemming K, Murtagh FE, Johnson MJ. Patient and health care professional decision-making to commence and withdraw from renal dialysis: A systematic review of qualitative research. Clin J Am Soc Nephrol 2015;10:1201-15.
4. Renal US. Data System. USRDS 2011 Annual Data Report: Atlas of End-Stage Renal Disease in the United States. Bethesda, MD: National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases; 2011.
5. Davison SN. The ethics of end-of-life care for patients with ESRD. Clin J Am Soc Nephrol 2012;7:2049-57.
6. Findlay MD, Donaldson K, Doyle A, Fox JG, Khan I, McDonald J, *et al.* Factors influencing withdrawal from dialysis: A national registry study. Nephrol Dial Transplant 2016;31:2041-8.
7. Schmidt RJ, Moss AH. Dying on dialysis: The case for a dignified withdrawal. Clin J Am Soc Nephrol 2014;9:174-80.
8. Holley JL, Carmody SS, Moss AH, Sullivan AM, Cohen LM, Block SD, *et al.* The need for end-of-life care training in nephrology: National survey results of nephrology fellows. Am J Kidney Dis 2003;42:813-20.
9. Thomas K, Armstrong Wilson J, GSF Team. The Gold Standards Framework proactive Identification Guidance (PIG). Royal College of General Practitioners; 2016. Available from: https://www.goldstandardsframework.org.uk/cd-content/uploads/files/PIG/NEW%20PIG%20-%20%20%2020.1.17%20KT%20vs17.pdf. [Last accessed on 2021 Mar 13].
10. Shaw KL, Clifford C, Thomas K, Meehan H. Review: Improving end-of-life care: A critical review of the gold standards framework in primary care. Palliat Med 2010;24:317-29.
11. Davison SN, Levin A, Moss AH, Jha V, Brown EA, Brennan F, *et al.* Executive summary of the KDIGO controversies conference on supportive care in chronic kidney disease: Developing a roadmap to improving quality care. Kidney Int 2015;88:447-59.
12. Macaden SC, Salins N, Muckaden M, Kulkarni P, Joad A, Nirabhawane V, *et al.* End of life care policy for the dying: Consensus position statement of Indian association of palliative care. Indian J Palliat Care 2014;20:171-81.