TIME-LIMITED TRIAL OF DIALYSIS: AN AUSTRALIAN AND NEW ZEALAND PERSPECTIVE

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BACKGROUND

Time-limited trials of treatment are often utilised in intensive care and involve mutually agreed-upon provision of treatment for a specified period.[1] Time-limited trials acknowledge clinical uncertainty, may address emotional needs and facilitate shared decision-making.[1]

Time-limited trial of dialysis (TLTD) outside the intensive care and acute kidney injury (AKI) setting is rarely discussed in the literature, though it has been recommended by the Renal Physicians Association, USA for patients where the benefit of dialysis is uncertain.[2] TLTD involves explicit outcomes that must be met for dialysis to continue.[3] There is a paucity of evidence around the benefits and outcomes in patients outside of the AKI and critical illness setting; and about how decisions to undertake TLTD are made.

The aim was to understand the experiences of nephrologists, nephrology Advanced Trainees and nephrology nurses with TLTD (outside of the AKI setting) in Australia/New Zealand.

METHODS

Anonymous, online survey distributed by Australia and New Zealand Society of Nephrology and Renal Society of Australasia to members between August and October 2023.

Respondents were asked about their experience of any TLTD in their department within the last 5 years, the availability of palliative care or kidney supportive care services, and their own opinions about TLTD.

TLTD in the survey did not refer to dialysis for an AKI where recovery was anticipated. See QR code for the full survey.

Royal Brisbane and Women's Hospital (RBWH) HREC committee (EX/2021/QRBW/80956) approved ethical exception.

Scan for TLTD Survey

RESULTS

There were 38 respondents (58% nursing, 42% medical; 76% female). The most common age group was 56-65 years (34%); the most common length of practice was 11-20 years (32%).

15 respondents (40%) reported a TLTD was offered in their department in the last 5 years, 13 (34%) indicated no TLTD had been offered and 10 (26%) were unsure. The majority (87%) reported TLTD in haemodialysis (HD) only, but two respondents (13%) reported experience with TLTD involving peritoneal dialysis (PD) and HD.

73% (n=11) reported limits were placed on trials. The most common limit was quality of life/symptom burden outcomes (82%, n=9) [Figure 1] and only 47% (n=7) reported a formal time-limit was specified.

> "The trials of dialysis I have seen have all been informal with an unwritten agreement with their VMO. This is less than ideal for the remaining treating team as it is hard to provide good support without clear parameters and treatment goals."

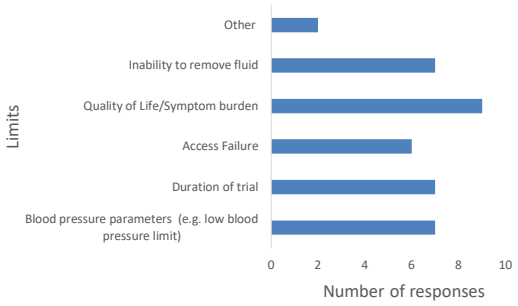

Figure 1: Limits of Time-Limited Trials of Dialysis

The most common reasons TLTD were offered instead of maintenance dialysis was advanced age (73%, n=11) followed by prognostic uncertainty (47%, n=7) and patient or family insisted (47%, n=7) [Figure 2]. Patients who underwent TLTD were commonly of advanced age (80%, n=12) and/or had multiple comorbidities (87%, n=13).

Most TLTDs resulted in transition to maintenance dialysis (60%, n=9). Free text responses reported poor outcomes of TLTD.

> "Rarely end well"

> "…often the outcome is not a good one and … the person spends their last days in hospital, undergoing complex medical interventions frequently with complications for no apparent benefit [to the] ultimate outcome [regarding] health, wellbeing or QOL"

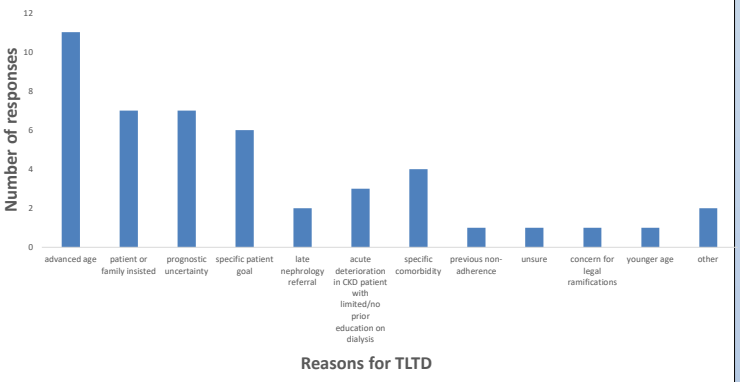

Figure 2: Reasons TLTD were offered rather than maintenance dialysis

Only 4 respondents indicated a second opinion was sought prior to TLTD. Second opinions came from another nephrologist, KSC service, palliative care physician or multidisciplinary team. Most respondents reported having a kidney supportive care service (74%).

Most medical practitioners (69%, 11/16) reported they always discussed prognosis with patients and 25% would never offer a TLTD. A free text response highlighted the potential benefit of TLTD.

> "Trial of dialysis helps patients to decide based on their own lived experience, rather than rely on probabilities founded on studies that do not translate well for an individual patient"

Of those who would offer a trial of dialysis, the most common reasons were specific patient-related goals (e.g. upcoming wedding/birth of grandchild) [8/12, 67%] or younger age (8/12, 67%).

In open text comments difficulties with dialysis withdrawal was a common theme.

> "My experience is once they start, they don't stop unless we withdraw treatment because they are undialysable"

> "When patients are informally given a 'trial of dialysis', despite whether they deteriorate or not, they rarely pull out."

> "Once initiated, dialysis is difficult to withdraw from the patient, despite poor quality of life"

DISCUSSION/CONCLUSIONS

To the best of our knowledge, this is the first study to look at clinician experience of TLTD in the non-AKI setting. Our results demonstrated that nephrology workforce has varied experiences of TLTD.

People who were offered TLTD were mostly older and/or had multiple comorbidities, which may reflect clinical equipoise for benefit of dialysis or inexperience in discussing conservative non-dialysis care.

Transition to maintenance dialysis was common following TLTD. This may indicate demonstrated benefit of dialysis, or the difficulties of shared-decision making around withdrawal from dialysis. The latter was reflected in some clinician comments.

This study was limited by low response rate and likely consequent selection bias. Further work is required to better understand the decision-making and outcomes in TLTD.

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