

Individuals commencing haemodialysis frequently have unmet physiotherapy needs identifiable by early physiotherapy intervention

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Background:

Individuals on haemodialysis may have access to a physiotherapist, but to our knowledge this is not routinely when starting haemodialysis and locally it can be 6 months after commencing treatment and with a focus on supporting exercise on dialysis. It is however recognised that haemodialysis comes with significant physical symptoms amenable to physiotherapy input¹.

Methods:

Participants: All Individuals commencing haemodialysis in a new starters unit at a metropolitan Centre of Excellence for chronic kidney disease (CKD) over a seven month period in 2019.

Aims:

For a physiotherapist to complete a comprehensive physiotherapy assessment for all individuals within 2 weeks of the commencement of haemodialysis.

To identify the physiotherapy needs in this cohort of patients and the appropriate management required.

The following data was collected for all patients:

Patient satisfaction with exercise information provided

Grip Strength (Kg) as a surrogate for global strength²

Duke's Activity Status Index (DASI) (out of 58.2) as a measure of functional capacity³

Falls History

Current physical activity levels

Prevalence of fatigue

Mobility

Results:

Assessment findings:

63 individuals received a comprehensive physiotherapy assessment within 2 weeks of their first dialysis session. 9 patients were not assessed within this time due to staffing. They were followed up at a later date but are not included in data analysis.

Dissatisfaction with exercise information before physiotherapy review was 64% but reduced to 6% after. 92% of individuals had a grip strength lower than expected norms (mean 61% of expected, SD 20%) and mean reported DASI scores were 26.2 (SD 14). 63% of individuals experience some level of fatigue. 39% of individuals reported at least one fall in the past 6 months and 5% reported multiple falls. 25% of individuals reported not completing any regular exercise and only 14% met physical activity guidelines⁴. 29% of individuals mobilised with walking aids and 5% required assistance for ambulation.

Interventions required:

All individuals received education and advice around physical activity and exercise for the management of CKD and associated secondary complications. Where indicated onward referrals and sign posting to renal specific exercise programmes (renal rehabilitation class or exercise on dialysis) and generic local exercise options (e.g. exercise on referral) along with tailored home exercise programmes were completed. These were aimed at improving uptake of exercise among this patient group to manage the symptoms they identified such as reduced exercise tolerance, shortness of breath, fatigue, strength or balance impairments

and for weight management. In addition to these, referrals on to outpatient and community physiotherapy services were made to manage musculoskeletal dysfunction, falls and reduced mobility as required.

Conclusion:

Within weeks of starting haemodialysis, individuals with CKD already present with a number of undesirable symptoms amenable to physiotherapy such as reduced strength, falls, low exercise participation, fatigue, reduced functional capacity and shortness of breath. Patients also lack sufficient information around the role of exercise in the management of these. Early comprehensive physiotherapy assessment is indicated to address these unmet needs in otherwise un-referred individuals.