

Assessment of the nutritional status of the hemodialysis patients by anthropometric measure

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This study assessed the nutritional status of end-stage renal disease (ESRD) patients on maintenance hemodialysis (MHD) by utilizing bedside anthropometric measurements.

This prospective cross-sectional study was done from November 2020 till April 2021 on ESRD patients three times a week MHD at our centre. Anthropometric measurements including body mass index (BMI), triceps skinfold thickness (TSFT), mid-arm circumference (MAC), calf circumference (CC) and handgrip strength (HGS) were measured mid-arm muscle circumference (MAMC) was calculated, and nutritional status was determined.

Out of 195 patients recruited in our study, 127 (65.1%) were male. The mean age was 51.2 ± 14.8 years with a minimum of 20 and a maximum of 90 years, while the mean duration of HD was 4.6 ± 4.1 years. The majority of our patients had TSFT of 60 % to 90% 93 (47.7%), indicating mild to moderate depletion of fat stores and MAMC of >90 % 128 (65.6%), indicating good protein stores. Among all anthropometric measures, BMI was strongly associated with age ($p < 0.001$), while gender and duration of MHD were associated with TSFT ($p < 0.001$).

Anthropometric measurements are easy and inexpensive bedside methods for assessing the nutritional status of ESRD patients on MHD. Our study concluded that our MHD patients have overall good nutritional status, though our young patients have low BMI and old have obesity. Male patients have weaker HGS. With the increased number of years on MHD, malnutrition increases. Our study will help to treat physicians and nutritionists for proper nutritional planning and implementation to prevent malnutrition.

Biography

Dr Sajid Sultan has obtained his medical graduation from Ayub Medical College Abbottabad Pakistan and has achieved Internal medicine and Nephrology Experience Under College of Physicians and Surgeons Pakistan at The Kidney Centre Postgraduate Institute Karachi. He is currently Working as Renal registrar in Faculty of Medicine at frontier Medical College Abbottabad Pakistan. He has three publications in Nephrology.

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