Importance of Nutrition in Dialysis Patients

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Treatment of end stage renal disease (ESRD) by maintenance Memodialysis is an example of an advanced medical technology prolonging life in a previously fatal condition. Many new developments, advanced concepts and methods have markedly changed the overall approach towards the management of ESRD. However, quality of life in the patient on haemodialysis is still lagging. The disease and treatment results in many deprivations, as these patients are dependent on a machine for 8-12 hours weekly for the rest of their life. The working capacity of the patient is often markedly decreased, multiple medications along with a strict dietary regimen can be a life long struggle for them. Therefore, the emphasis is now gradually shifting from mere survival to long term survival and rehabilitation of these patients. To achieve this, care providers regulate the dialysis prescription and try to prevent or treat subsequent medical problems that may lead to morbidity and mortality. Malnutrition is now established as one of the main factors that increases the risk of morbidity and mortality in these patients. Elsewhere in these pages, a renal unit from Karachi reports 40-50% dialyzed patients who are malnourished based on their anthropometric and dietary indices. The reasons for malnutrition in these individuals are altered endocrine and metabolic functions which contribute to decreased appetite. Multiple medications also affect appetite and metabolism of nutrients. Above all, the therapeutic low protein diet initiated in the predialytic stage in the hope of delaying disease progression may all contribute to malnutrition. The diagnosis of malnutrition is a specialized procedure, requiring compilation of many facts and observations over a period of time. It is important that periodic assessment of nutritional status and frequent monitoring of dietary intake should be apart of the treatment plan for the dialysis patients. The techniques and methods should be economical, simple and easy in our set-up. These can be diet history records, somatic protein and fat stores estimated by anthropometric measurements of weight/height, skin fold thickness and mid -ann circumference. Biochemical parameters which can be of benefit are serum protein, albumin and transferrin. These measures can also help to identify patients who are at risk from malnutrition, for institution of timely nutrition therapy. Risk factors for the identification of malnourished dialyzed patients could be any one of the factors viz., actual body weight less than 80% of ideal body weight, decrease of < 15% in anthropometric indices, increased metabolic need from infection/sepsis, recent surgery or any other catabolic condition, nutrient losses secondary to malabsorption, persistent nausea, vomiting or lack of appetite due to uraemic condition, serum albumin concentration <3.5 gm/dl, total serum protein concentration <6.0 gm/dl and problems with mastication and/or dysphagia. Patients with ESRD have benefited from the major advances in dialysis over the past decades, nevertheless, mortality due to malnutrition is still relatively high during haemodialysis. The prognostic importance of the nutritional status on mortality in dialysis patients calls for a concerted effort by both physicians and nutritionists familiar with the special needs of patients with chronic renal insufficiency. Nutrition education and counseling are an essential aspect of the medical management of renal disease. Nutritionist can play a crucial role in helping these patients and their families to cope with a chronic medical condition that affects every aspect of their lives. We are entering an era when measurements of the adequacy of dialysis are likely to become routine, especially due to the apparent higher mortality in dialysis patients. Consequently improving and maintaining the nutritional status of dialysis patients is important for their well-being.
References