

PROTEIN-ENERGY STATUS IN PATIENTS RECEIVING DIALYSIS

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Abstract

In patients with chronic renal failure (CRF) the therapy consists of renal replacement therapy (RRT) including dialysis, peritoneal dialysis and kidney transplantation. Assessment and monitoring of nutritional status are the key elements of the optimal treatment of kidney patients; they are carried out using methods ranging from simple measurements to comprehensive forms which include anthropometric, biochemical and subjective assessment methods of the patients' nutritional status. To prove protein-energy malnutrition - PEM - malnutrition-inflammation score - MIS, a comprehensive test of malnutrition and inflammation syndromes is used. The sum of these 10 MIS components ranges from 0 to 30 indicating a higher degree of severity. The test consists of 10 parts, each with four severity levels from 0 (normal) to 3 (very severe). MIS score values determine the presence or absence and the degree of PEM. The aim of this study is to review the dialysis patients' PEM at a hospital in Croatia.

The study, which was approved by the hospital ethics committee, was conducted in March and April 2015 on a population of patients (70) included in the chronic dialysis program (at least three months) and older than eighteen. The study encompasses data on the patients' history, physical examination, laboratory test results (serum albumin and TIBC - total iron binding capacity), and BMI - Body Mass Index. For the diagnosis based on the three parameters it is necessary that two of them be positive.

The results show that 16 patients (23%) have PEM, whereas 54 patients (77%) do not have it. The patients on dialysis with the proven PEM have been given oral therapy with preparations for enteral nutrition: between meals (at least 1 - 2 hours after a meal), in the last hour of dialysis (1-2 hours after a meal on dialysis), and a late meal (around 10 p.m.).

The assessment of the dialysis patient's nutritional status should be carried out twice a year. The treatment of these patients is very complex and requires constant cooperation of nurses, doctors and patients. Good education and cooperation of patients and their families can be helpful in achieving good results and in facilitating dialysis process for patients.

Key words: *Nutrition, Dialysis, Protein-energy malnutrition, Assessment of nutritional status.*