INTRADIALYTIC PARENTERAL NUTRITION EFFECTS ON ALBUMIN LEVELS IN MALNOURISHED HAEMODIALYSIS PATIENTS

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BACKGROUND AND IMPORTANCE

Malnutrition is one of the strongest predictors of mortality and morbidity in haemodialysis patients. Albumin levels are used as an indicator of its severity and concentrations under 3.8 g/dl indicate severe malnutrition.

As first-line treatment, guidelines recommend nutritional counseling and oral nutrition supplements. Furthermore, parenteral nutrition during regular haemodialysis sessions, known as intradialytic parenteral nutrition (IDPN), is an option for patients who can’t tolerate oral or enteral routes for nutrition supplements.

AIM AND OBJECTIVES

The aim of this study is to evaluate the effects of IDPN on albumin concentrations in malnourished haemodialysis patients.

MATERIAL AND METHODS

Observational retrospective study carried out with patients who had been in treatment with IDPN in the last five years, from April 2016 to April 2021. Age, sex, height, weight, body mass index, IDPN start and end dates, and albumin levels were collected to create database. Statistical evaluation was done using Rcommander® software.

RESULTS

In this five years period, the total number of patients was seven (N=7):

- Initial albumin levels were under 3.8 g/dl in 100% of the patients and the mean was 2.7 ± 0.58 g/dl.
- Mean duration of IDPN was 36 days (3-150).
- Albumin concentrations increased in all patients and the mean increase was 0.80 ± 0.32 g/dl.
- 42.9% of them (n=3) reached albumin levels higher than 3.8 g/dl.

CONCLUSION AND RELEVANCE

IDPN has shown an improvement in albumin concentrations among hemodialysis patients, however, further investigations are required to establish a relation with mortality and morbidity.