

ABSTRACT

The Effect of Egg White Supplementation on Hemodialysis Adequacy and Nutritional Status Patients of Stage V Chronic Kidney Disease Patients on Hemodialysis

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Background: Egg white is an animal protein that is claimed to improve nutritional status, maintain adequate phosphorus levels and haemodialysis adequacy to avoid malnutrition, which is a predictor of morbidity and mortality in haemodialysis patients.

Objective: To analyse the effect of egg white feeding on haemodialysis adequacy and nutritional status of stage V CKD patients on haemodialysis..

Methods: This study used a quasi-experimental method of pre-post-test with control group design. The subjects of this study were divided into two; the control group received nutrition education according to nutritional needs, the intervention group received nutrition education, 6 egg whites (± 168 g) 3x/week for 2 months. Energy and protein intake using SQ-FFQ three times (baseline, 1 month and end of the study). Muscle mass, albumin and phosphorus measurements were taken before and after treatment then correlation test was carried out between nutritional status and Kt/V.

Results: There was a significant difference in egg white administration on the increase in muscle mass and albumin in both groups ($p < 0.05$). There was no difference in phosphorus levels in both groups, but the intervention group's phosphorus levels were better than the control group. There was a positive relationship between nutritional status and HD adequacy ($p < 0,005$). There was an effect of egg white feeding on the muscle mass of patients ($p < 0.05$).

Conclusion: Egg white supplementation of approximately 6 egg white (± 168 g) three times a week can improve the nutritional status of haemodialysis patients. Nutritional status is positively associated with haemodialysis adequacy

Keywords: Egg white, Albumin, Muscle mass, Phosphorus, Kt/V

ABSTRAK

Pengaruh Pemberian Putih Telur terhadap Adekuasi Hemodialisis dan Status Gizi Pasien Penyakit Ginjal Kronis Tahap V Hemodialisis

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Latar Belakang: Putih telur merupakan protein hewani yang diklaim mampu meningkatkan status gizi, mempertahankan kadar fosfor dan adekuasi hemodialisis menjadi adekuat supaya tidak terjadi malnutrisi yang merupakan prediktor morbiditas dan mortalitas pasien hemodialisis.

Tujuan: Menganalisis pengaruh pemberian putih telur terhadap adekuasi hemodialisis dan status gizi pasien PGK tahap V dengan hemodialisis.

Metode: Penelitian ini menggunakan metode *quasi eksperimen pre-post-test with control group design*. Subjek penelitian ini dibagi menjadi dua; kelompok kontrol mendapat edukasi gizi sesuai kebutuhan gizi, kelompok intervensi mendapat edukasi gizi, 6 butir putih telur (± 168 gr) 3x/minggu selama 2 bulan. Asupan energi dan protein menggunakan SQ-FFQ sebanyak 3x (awal, 1bulan dan akhir penelitian). Pengukuran masa otot, albumin, fosfor dilakukan sebelum dan sesudah perlakuan, kemudian dilakukan uji korelasi antara status gizi dengan Kt/V.

Hasil: Terdapat perbedaan signifikan pemberian putih telur terhadap peningkatan masa otot dan albumin pada kedua kelompok ($p < 0,05$). Tidak terdapat perbedaan kadar fosfor pada kedua kelompok, namun kadar fosfor kelompok intervensi lebih baik daripada kelompok kontrol. Terdapat hubungan positif antara status gizi dengan adekuasi HD ($p < 0,05$). Terdapat pengaruh pemberian putih telur terhadap masa otot pasien ($p < 0,05$).

Kesimpulan: Pemberian 6 butir putih telur, 3x/minggu selama 2 bulan dapat meningkatkan status gizi pasien HD. Status gizi berhubungan positif dengan adekuasi HD

Kata Kunci: Putih telur, Albumin, masa otot, Fosfor, Kt/v