



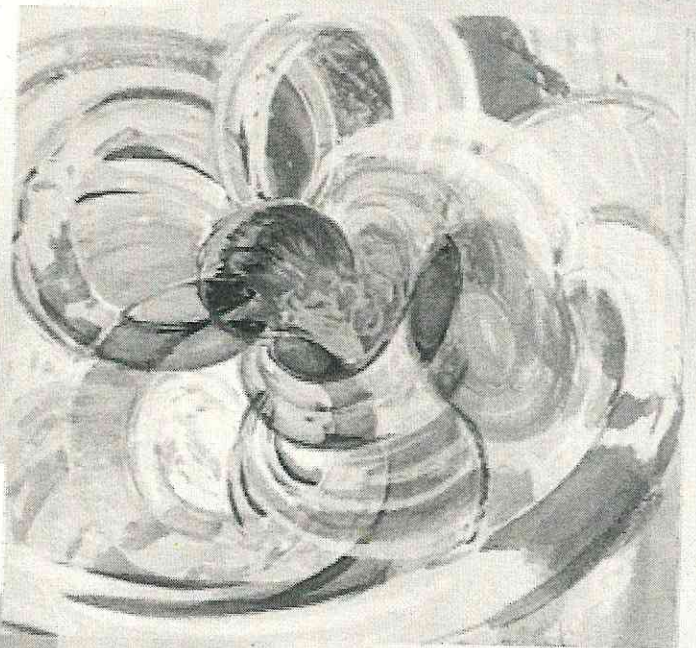
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ABSTRACTS ON CD-ROM



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Nephrology

Study for Discus of Newton  
František Kupka, 1911-1912 gouache, watercolour on paper  
28,5 x 26,5 cm  
From the Museum Kampa  
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## [F120] NORMALIZATION OF BODY MASS INDEX IN PATIENTS WITH CHRONIC KIDNEY DISEASE IN TREATMENT WITH LOW PROTEIN DIET

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### INTRODUCTION AND AIMS:

Nutritional intervention in uremia, specifically the restricted protein diet, has been under debate for decades, the results of various clinical trials have not been concordant. Recently published data show that the restricted protein diets seem to be effective and safe in ameliorating nitrogen waste products retention and the disturbances in acid-base and calcium-phosphorus metabolism, and in delaying the initiation of renal replacement therapy (RRT), without any deleterious effect on the nutritional status of patients with chronic kidney disease. The nutritional support and the supplemented very low protein diet could be a new link to the RRT-integrated care model. The aim of the study was to evaluate the nutritional analysis in patients with Chronic Kidney Disease, assess the compliance at nutritional intervention, estimate the effects of dietary treatment on nutritional status and prevent and correct malnutrition.

### METHODS:

We performed a prospective, open-label, parallel, randomized, controlled trial.

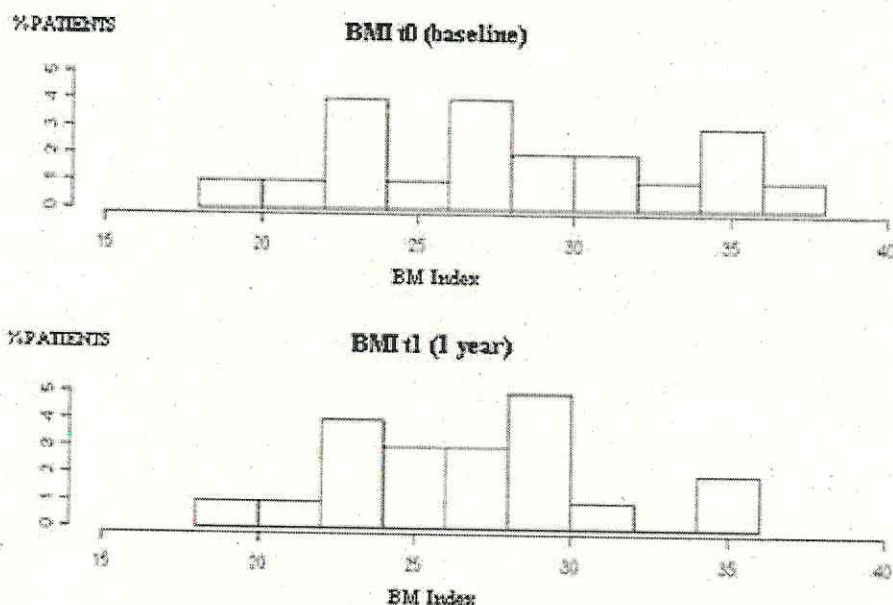
We observed at 6 month and at 1 year a total of 119 (53 F; 66 M mean age, 57 ± 16 years) patients with CKD with an estimated glomerular filtration rate less than 60 mL/min/1.73 m<sup>2</sup> (MDRD) and anticipated good compliance with the diet were enrolled.

The nutritional status was assessed using bioimpedenziometry and anthropometric rates (weight, height, BMI and body circumferences), biochemical markers (total protein, albumin, lipid profile, glicemy, urea, creatinine, uric acid, electrolytes, proteinuria 24h) and was finally collected the medical history and diet with special care to food diary completed by patients.

### RESULTS:

In patients with good compliance to dietetic prescriptions we observed at 6 month and at 1 year a reduction of urea, but not very significativity, an improvement of GFR and a reduction of proteinuria 24H (p=0.02).

Furthermore at the same period of control we observed a reduction of BMI (p= 0.02) in obese patients, a lower central obesity in the same patients, a normalization of BMI in the other patients, an increase of muscle mass (p=0.003) and fat-free mass (p=0.005) and a lower fat mass (p= 0.005).



### CONCLUSIONS:

The benefits of low-protein diet include the amelioration of uremia symptoms and some of its metabolic complications and possibly a slowing of the rate of progression of renal failure. However, a careful selection of motivated patients who could benefit from such a diet, closer nutritional monitoring, and dietary counseling are required.

**Date:** Friday, June 24, 2011

**Session Info:** Poster Session: Progression & risk factors CKD 1-5 (1)