

Specialized oral nutritional supplementation increases hand-grip strength in older hemodialysis patients

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INTRODUCTION

Renal replacement therapy generates nutritional losses, with a consequent impact on weight and muscle strength leading to changes in the physical and functional capacity of these patients. Hand-grip strength is recommended by ESPEN as a way of assessing muscle function in patients with chronic kidney disease.

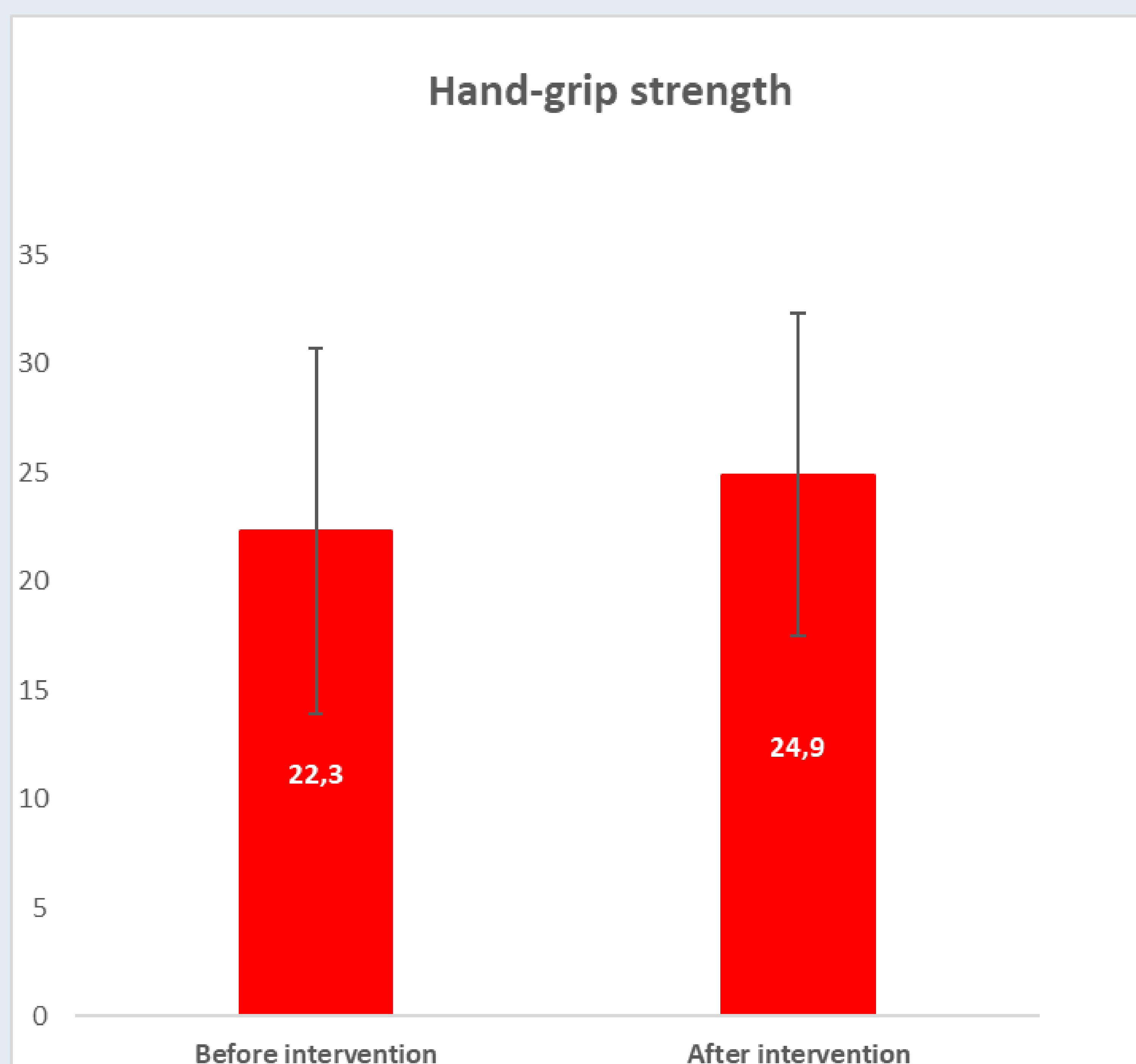
AIM

This study aimed to evaluate the effect of specific nutritional supplementation on the hand-grip strength of patients with chronic kidney disease before and after the intervention with oral nutritional supplementation.

RESULTS

The study included 46 patients, 71.7% (n = 33) were men. The mean age was 68.7 years ± 7.7 years.

The mean hand-grip strength before the intervention was 22.3 kg ± 8.4 kg. After the three-month intervention, the mean value increased to 24.9 kg ± 7.4 kg, a statistically significant difference (t = 5.229; p < 0.001).



METHOD

This is an interventional and experimental longitudinal study. The research was approved by the Research Ethics Committee of the Universidade de Passo Fundo, Brazil. For a period of three months, patients aged 60 years or older received the nutritional supplement three times a week during hemodialysis sessions.

A 200 mL unit of the nutritional supplement contains 13.4 g of protein, 40 g of carbohydrate, and 9.2 g of lipid, in addition to vitamins, minerals (with controlled levels of potassium and phosphorus) and fiber (HDmax – Prodiet Medical Nutrition). Measurements were taken on the limb without the arteriovenous fistula. Results are expressed as mean and standard deviation. The Student's t-test was used for paired samples, with a significance level of p < 0.05.

CONCLUSIONS

Specialized nutritional supplementation increases hand-grip strength in older hemodialysis patients, probably because of an increased dry weight and replacement of nutritional losses caused by hemodialysis.

REFERENCES

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