



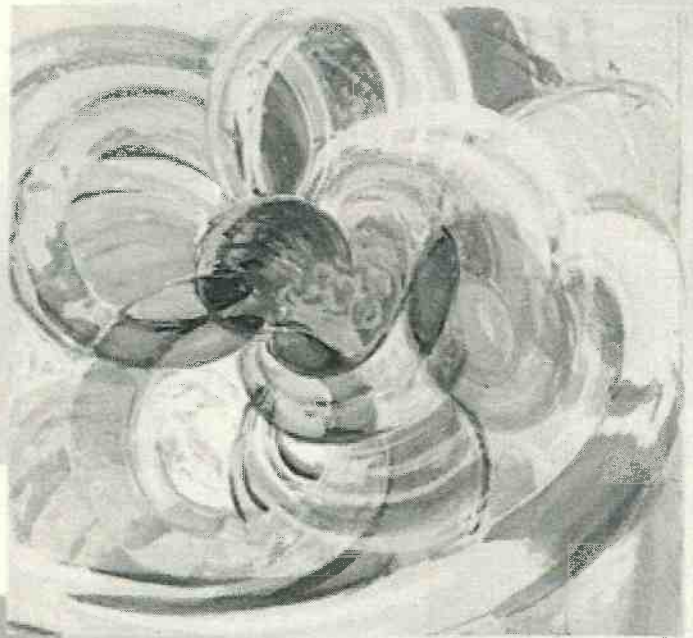
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XLVIII
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prague czech republic
june 23-26, 2011

ABSTRACTS ON CD-ROM



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Nephrology

Study for Discs of Newton
Frantisek Kupka, 1911-1912 gouache, watercolour on paper
25.5 x 25.5 cm
From the Museum Kampa
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[Sa378] IMPROVEMENT OF DIALYSIS EFFICIENCY WITH MUSCULAR MOBILIZATION

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INTRODUCTION AND AIMS:

There are many studies showing beneficial psychophysical effects of exercise in dialyzed patients. Moreover, it has been suggested that exercise positively correlates with better efficiency of dialysis on solute removal and reduced the post-dialysis urea rebound.

Aim of the study was to determine the impact of intradialytic exercise on dialysis efficacy and post-treatment rebound.

METHODS:

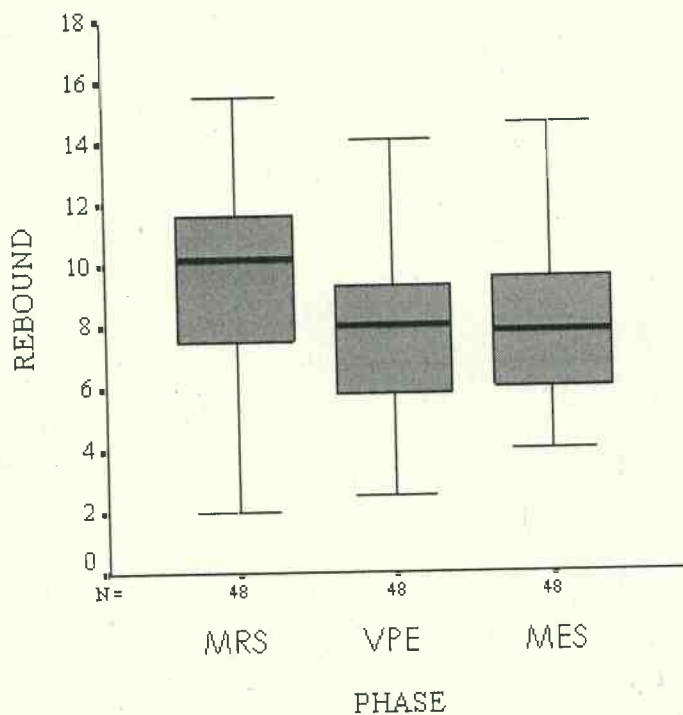
One-group repeated measures

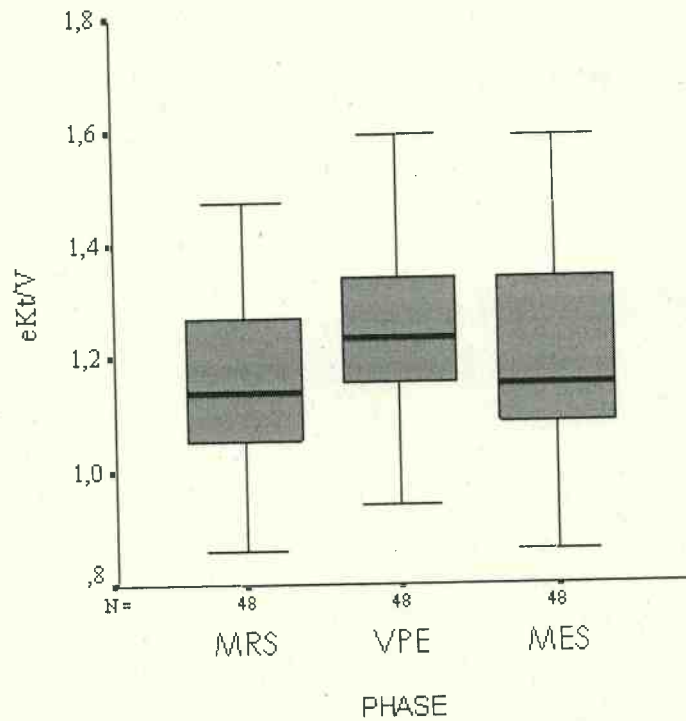
Twenty patients (11 males and 9 females) were selected for this study. All patients showed motivation to participate in the study and provided informed consent to participate in a specific program of training during dialysis treatment.

The study planning was concerned with three observation phases in which one all patients were studied on three dialysis sessions with identical prescriptions on the same day of consecutive weeks. In the first phase patients had an usual muscular rest sittings (MRS), in the second one they practised a voluntary physical exercises (VPE), whereas in the last experimental phase a muscular electrical stimulation was applied (MES).

RESULTS:

URR Rebound in MRS 9.70 ± 3.17 , in VPE 7.76 ± 2.98 ($p < 0.005$), in MES 8.08 ± 2.88 ($p < 0.01$); eKt/V in MRS 1.17 ± 0.17 , in VPE 1.24 ± 0.15 ($p < 0.05$), in MES 1.20 ± 0.16 .





There were no side effects or medical complications associated with either the exercise training or the use of electrical muscle stimulator unit during hemodialysis.

CONCLUSIONS:

A low-intensity intradialytic exercise program is a viable adjunctive therapy, which improves hemodialysis efficacy and reduces rebound of solutes compared to exercise free time. Furthermore, neuromuscular electrical stimulation during dialysis session is safe and useful for appropriately selected patients.

Date: Saturday, June 25, 2011

Session Info: Poster Session: Cardiovascular complications in CKD 5D (2)

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