



THE IMPACT OF A TRADITIONAL DANCE PROGRAM ON LOWER EXTREMITY MUSCLE PERFORMANCE IN CARDIAC REHABILITATION

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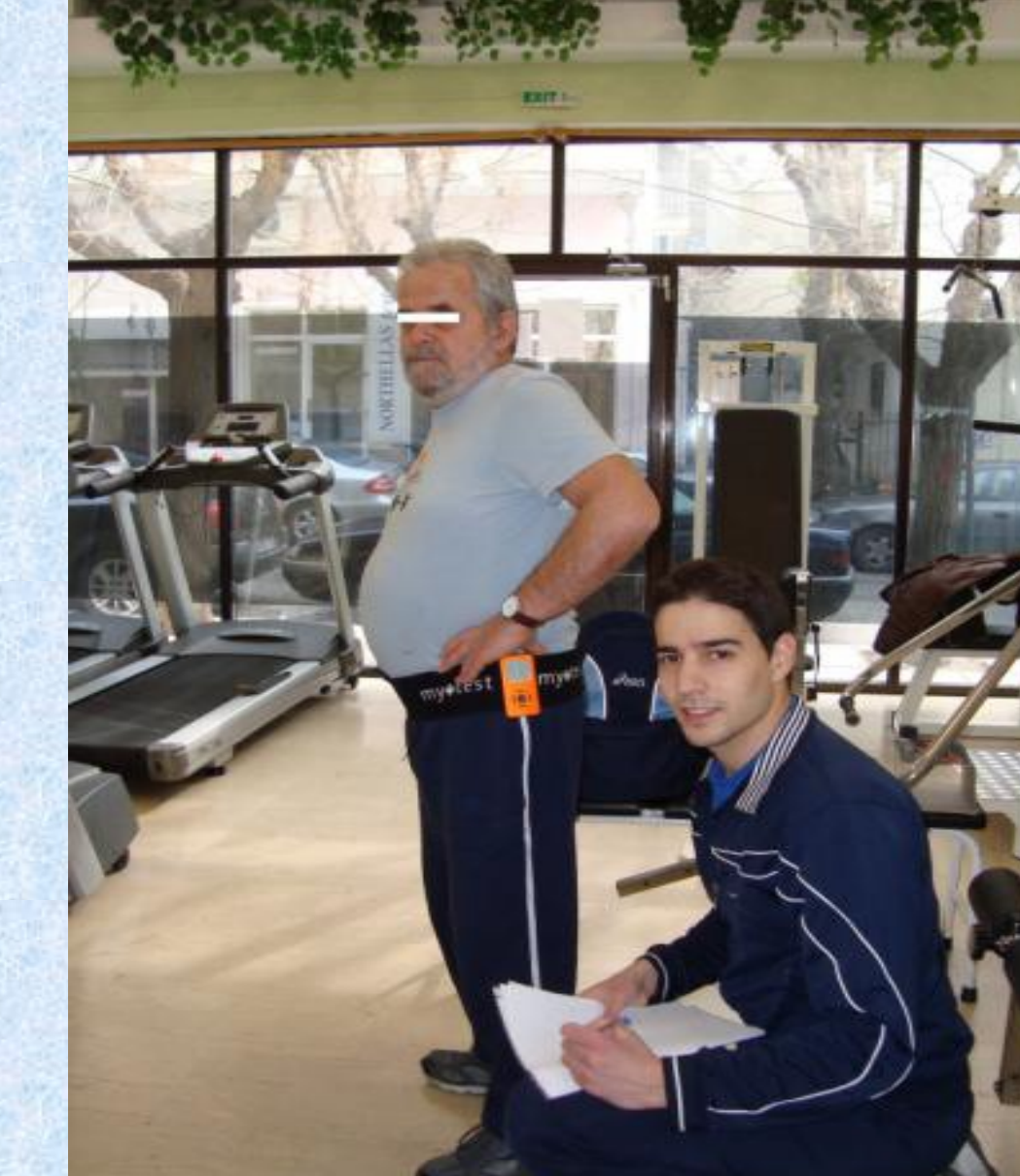
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PURPOSE

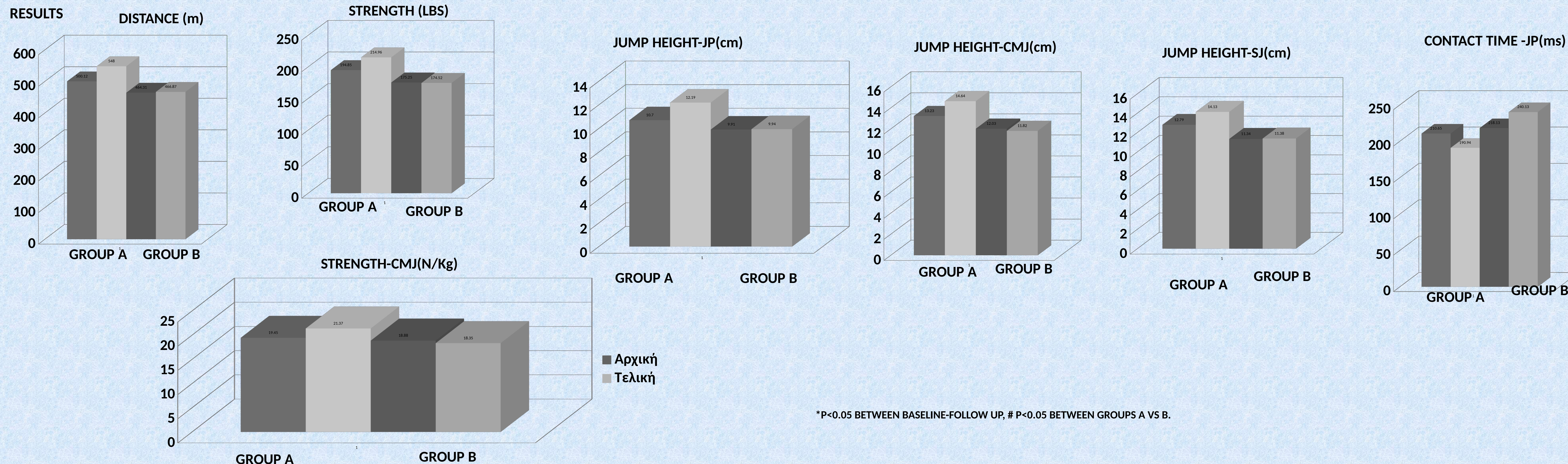
THE PURPOSE OF THE PRESENT STUDY WAS TO EVALUATE THE IMPACT OF A TRADITIONAL DANCE TRAINING PROGRAM ON JUMPING ABILITY, MUSCLE STRENGTH AND ENDURANCE OF THE LOWER EXTREMITY IN PATIENTS WITH CHRONIC HEART FAILURE (CHF).

METHODS

THIRTY THREE CHF PATIENTS (NYHA ≤ II), AGED FROM 65 TO 81 WERE RANDOMLY ASSIGNED INTO TWO GROUPS: GROUP A (17 PTS, AGED 73±5 YEARS), THAT PARTICIPATED IN A 12-WEEK EXERCISE PROGRAM WITH GREEK TRADITIONAL DANCES AND GROUP B (16 PTS, AGED 75±4 YEARS), WHO WERE USED AS SEDENTARY CONTROL. AT BASELINE AND FOLLOW-UP, THE EXERCISE TOLERANCE WAS EVALUATED BY SIX-MINUTE WALKING TEST (6MWT), THE LOWER EXTREMITY MUSCLE STRENGTH BY AN ISOKINETIC DYNAMOMETER AND THE JUMPING ABILITY BY MYOTEST - PRO PERFORMING THREE JUMPS (PLYOMETRIC-JP, COUNTERMOVEMENT-CMJ AND SQUAT JUMP- SJ).



RESULTS



*P<0.05 BETWEEN BASELINE-FOLLOW UP, # P<0.05 BETWEEN GROUPS A VS B.

AT BASELINE, THERE WAS NO STATISTICALLY SIGNIFICANT DIFFERENCE BETWEEN THE TWO GROUPS. AT FOLLOW-UP, GROUP A SHOWED IMPROVEMENTS IN THE DISTANCE WALKED IN THE 6MWT BY 10.0% (P<0.05), THE MUSCLE STRENGTH BY 10.3% (P<0.05) AND THE PEAK JUMP HEIGHT ACHIEVED ON THE JP BY 13.9% (P<0.05), ON THE CMJ BY 10.7% (P<0.05) AND ON THE SJ BY 10.5% (P<0.05). GROUP A ALSO SHOWED INCREASED POWER AND SPEED IN THE CMJ (BY 8.5% AND 6.9% - P<0.05, RESPECTIVELY) AND IN THE SJ (BY 8.2% AND 5.8% - P<0.05, RESPECTIVELY) COMPARED TO GROUP B. THERE WAS NO STATISTICALLY SIGNIFICANT DIFFERENCE IN GROUP B OVERTIME. THERE WERE NO EXERCISE RELATED COMPLICATIONS.

CONCLUSIONS

A 12- WEEK PHYSICAL REHABILITATION PROGRAM WITH GREEK TRADITIONAL DANCES IN CHF PATIENTS IS EFFECTIVE IN IMPROVING THEIR LOW LIMB FUNCTION.