



Effect of kinesitherapy on the kinetic parameters of gait in patients with supratentorial unilateral stroke in chronic period



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OBJECTIVE

The aim of the study is to trace the effects of specialized kinesitherapeutic methodology (SKTM) on the kinetic parameters of gait in patients with supratentorial unilateral stroke in the chronic period (SUSChP), which is developed on the grounds of the principles of motor control, motor learning and modern guidelines of neurorehabilitation.

MATERIALS AND METHODS

The study was conducted with 67 patients with SUSChP (56 patients included in the experimental group - 32 men and 24 women, with duration of disease 7.8 ± 2.0 months, and 11 patients in the control group - 9 men and 2 women, with duration of disease 7.3 ± 1.5 months).

To evaluate the changes in the gait were followed cadence of 6m and 10m and the speed of movement which are the most informative kinetic parameters. Patients in the experimental group were treated with a specialized 10-day KT, which later continued to perform as an adapted exercise program at home for a period of one month.

RESULTS

After applying SKTM, the highest trend towards improvement in the kinetic parameters of gait was established after the 1st month with a level of significance during treatment $p < 0.001$.

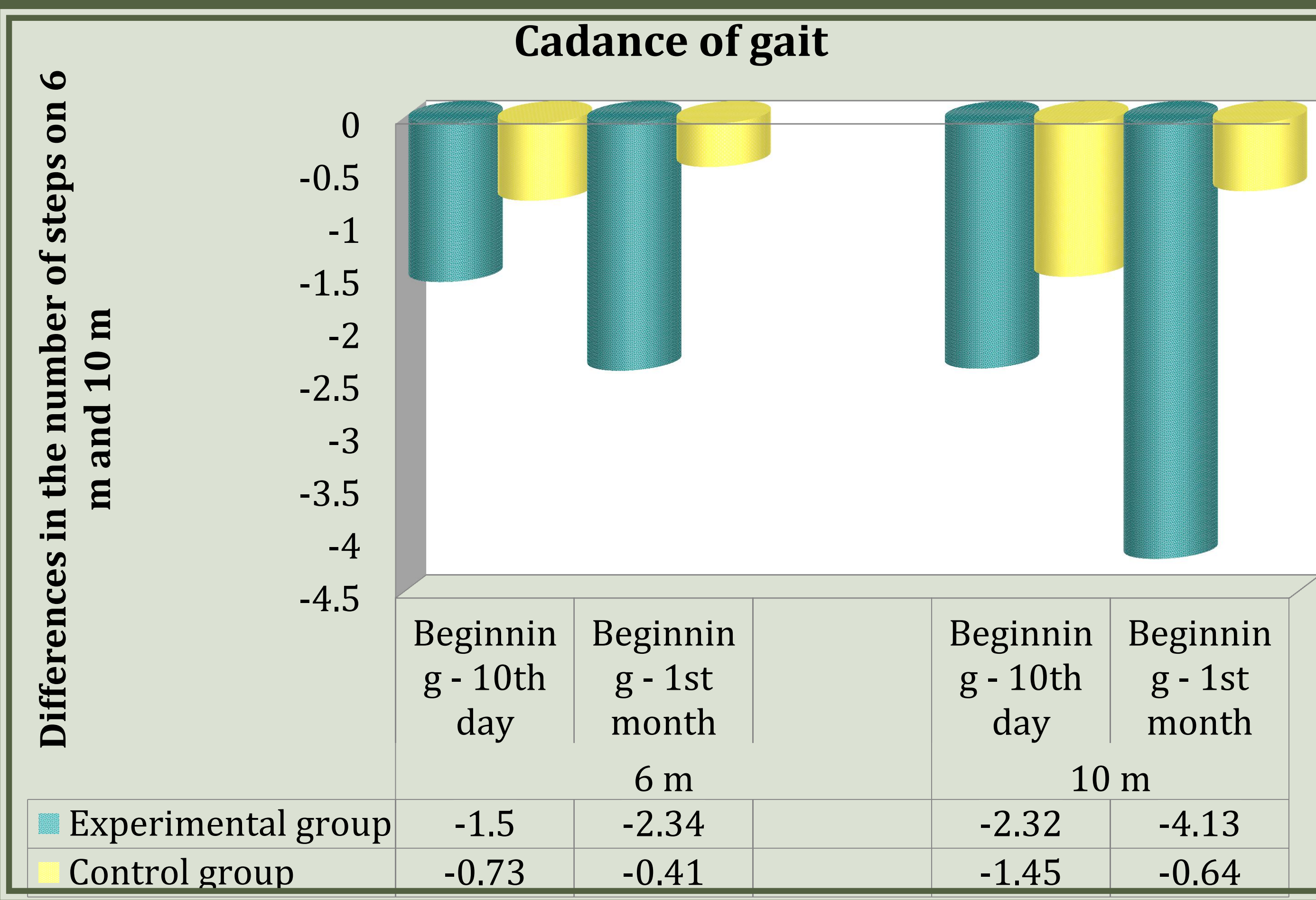


Fig.1 Graphical representation of changes in cadence of gait on 6 m and 10 m

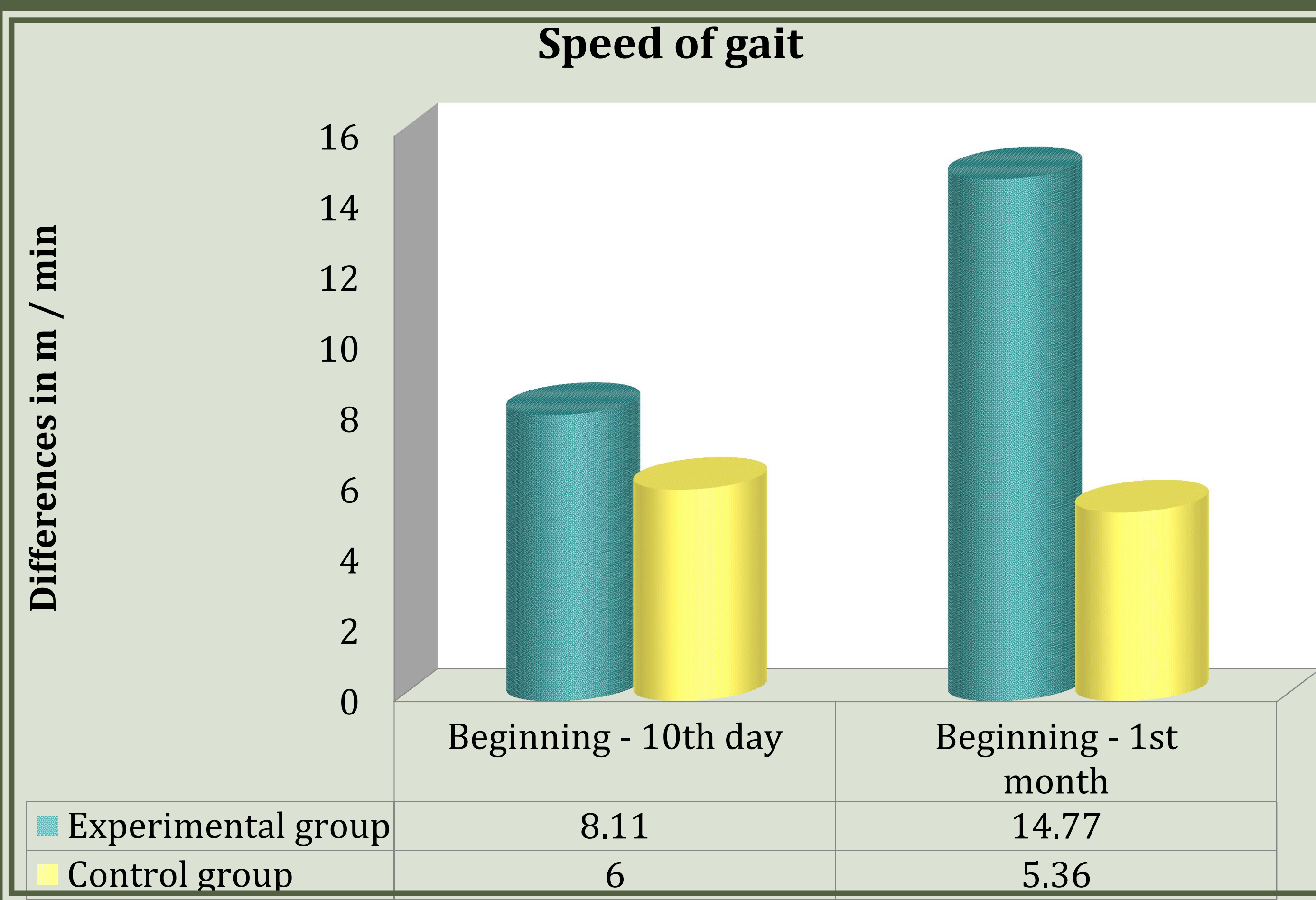


Fig.2 Graphical representation of changes in speed of gait

CONCLUSIONS

The applied SKTM in the experimental group continued later as an adapted exercise program at home, significantly improving the kinetic parameters of gait in patients with SUSChP.

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Kinetic parameters

Gait

Chronic period