



Effect of kinesitherapy on static and dynamic balance in patient after vertebro-basilar system stroke



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PURPOSE

To assess the effect of a kinesitherapeutic (KT) methodology administered in a patient who survived an ischemic stroke of the vertebro-basilar system (VBS) during the post-acute stage

MATERIALS AND METHODS

The case studied a 62 years old female patient, who survived an ischemic stroke and pulmonary thromboembolism and was administered to individual KT sessions, 3X weekly for a month. The KT included exercises for the general performance status, improving the lower limbs strength, the static and dynamic trunk control from different starting positions and coordination.

Methods for evaluation of changes have been used at baseline and after completion the KT sessions: "Berg Balance Scale", "Timed Up & Go", "Five Time Sit-To-Stand" and the test „Sit-To-Stand per 30 sec”.

RESULTS

After completion of the KT sessions it was found improvement in postural stability, strength and coordination of the movement of the lower limbs, dynamic balance and carrying out activities combined in everyday life.

CONCLUSIONS

The Case study has shown that applied therapeutic exercises resulted in improved static and dynamic balance in patient with VBS stroke.

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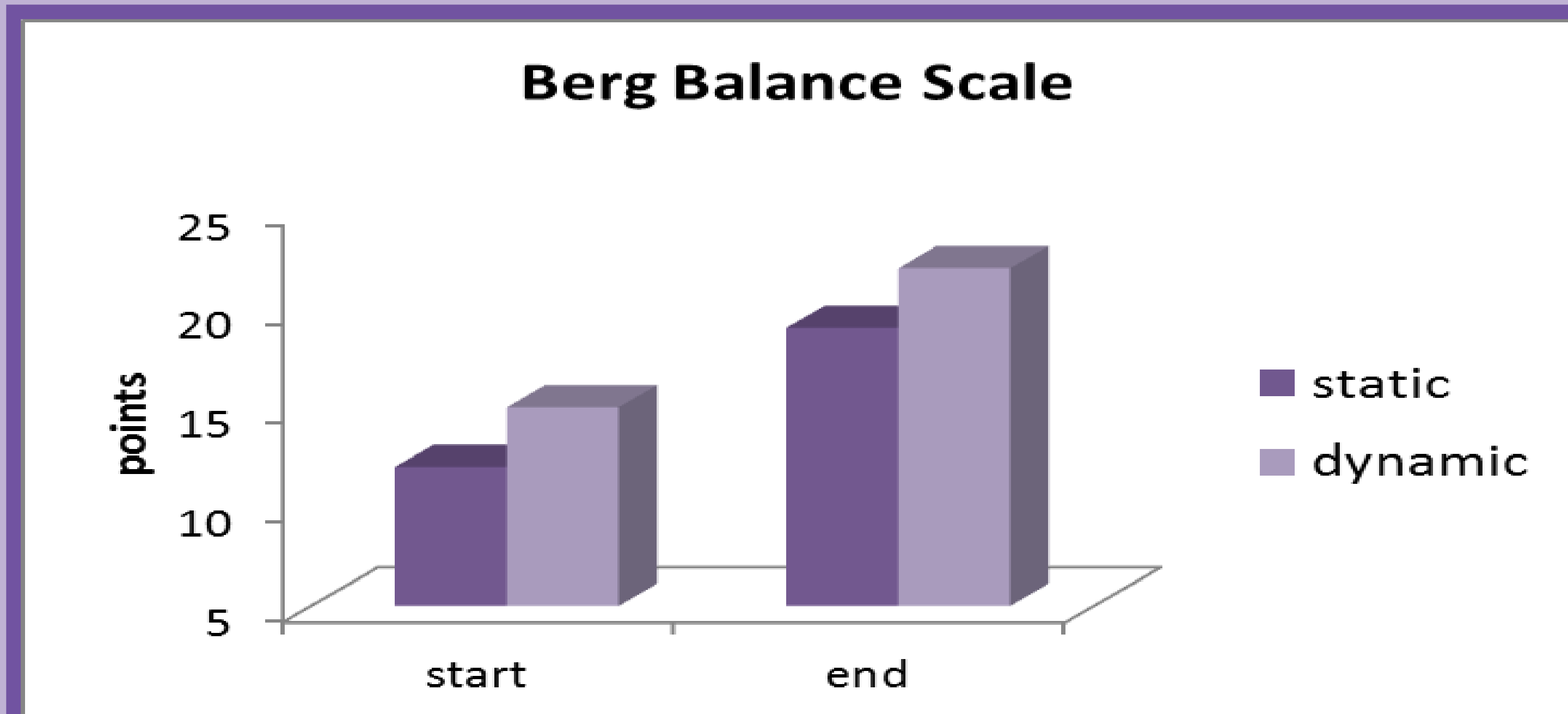


Fig.1 Changes in the static and dynamic balance (points) before and after kinesitherapy

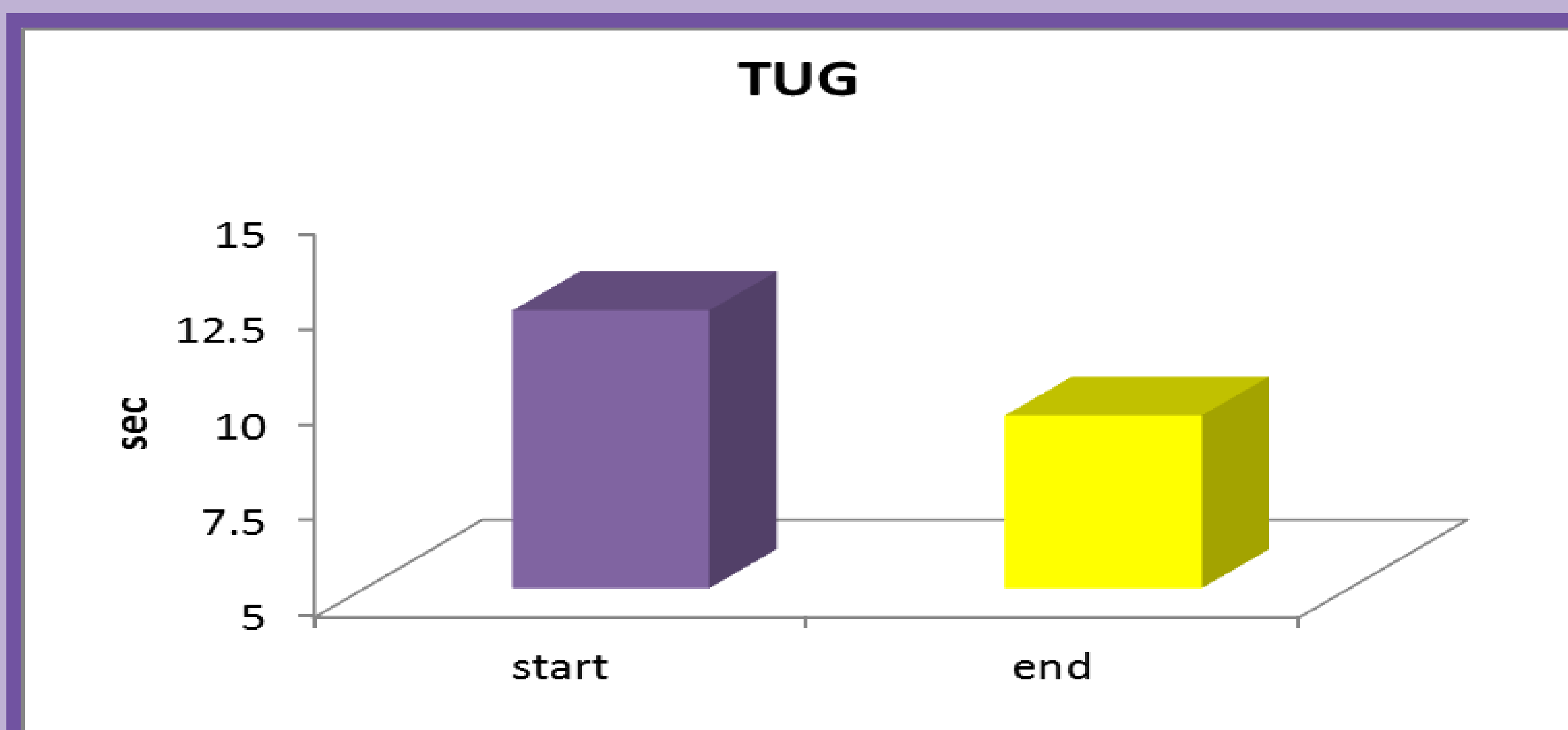


Fig.2: Changes in Timed Up & Go (sec) before and after kinesitherapy

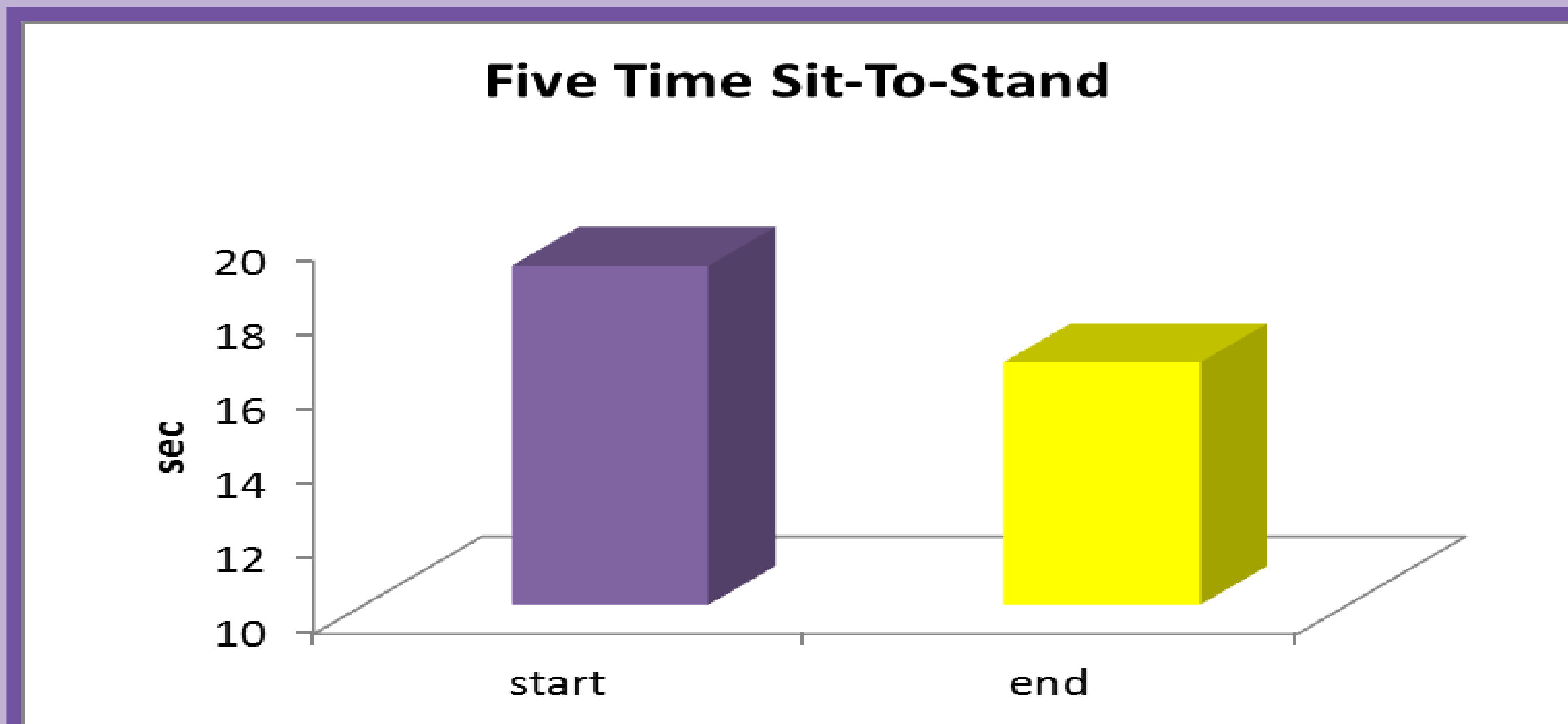


Fig. 3 Changes in the test "Five Times Sit-To-Stand" (sec) before and after kinesitherapy

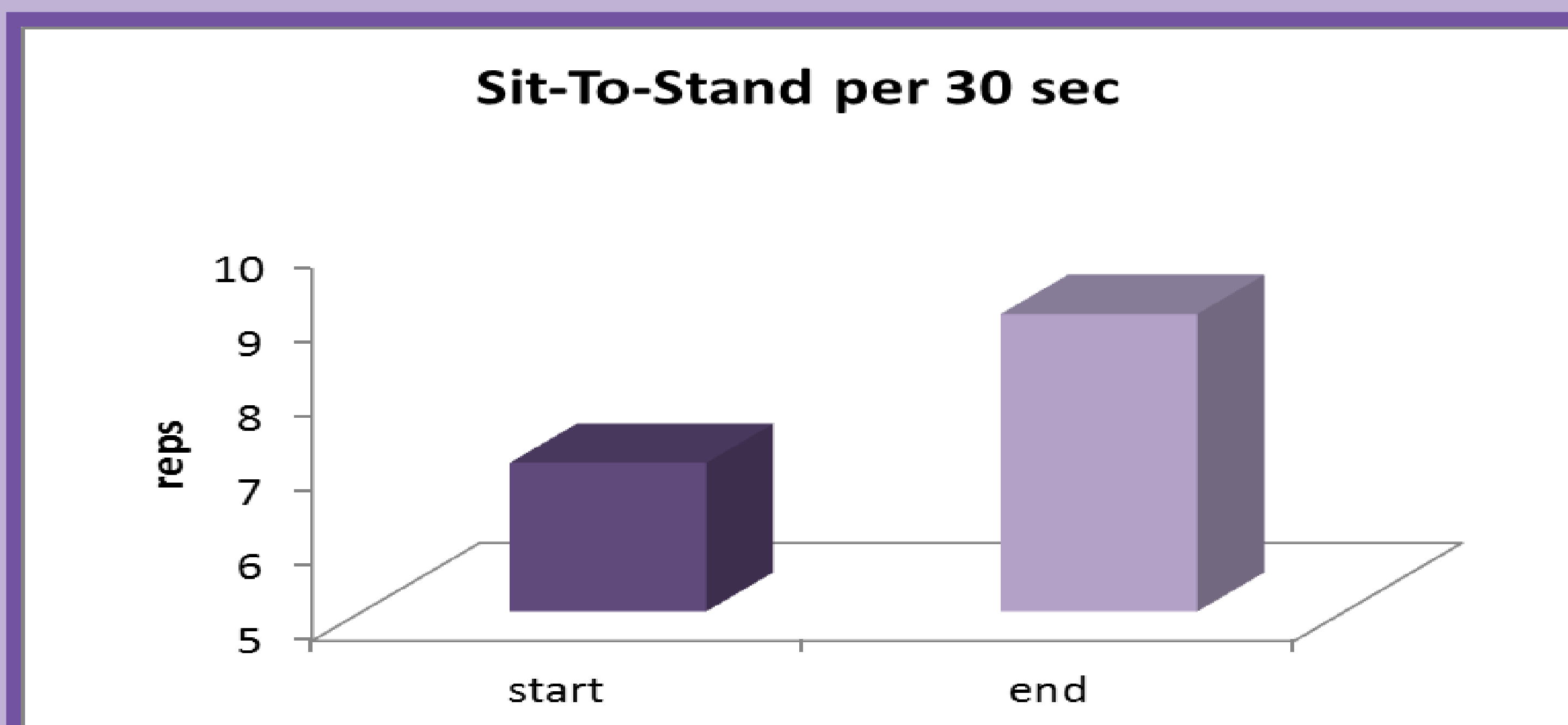


Fig. 4 Changes in the test "Sit-To-Stand per 30 sec" before and after kinesitherapy

Keywords:
*Postural stability,
Balance,
VBS ischemic stroke*