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## KINESITHERAPY IN PATIENTS WITH MULTIPLE SCLEROSIS

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**The aim** To improve the balance capabilities and functional independence in patients with multiple sclerosis (MS).

**Material and Methods:** The study was conducted in 20 patients (age  $52.1 \pm 6.5$  years) with a disease duration of  $8.7 \pm 4.6$  years and severity of total functional deficits -6 according to the Kugtzke scale. At the beginning of the study, patients' movements and motor skills were limited: they moved with help and needed help with their daily activities. For this purpose are used standing on one leg (sec), Berg balance scale and test for functional independence (FIM). Kinesitherapy included exercises to improve coordination and balance, through exercises for static and functional balance, maintaining the volume of movement in the joints and overcoming muscle imbalance in active movements.

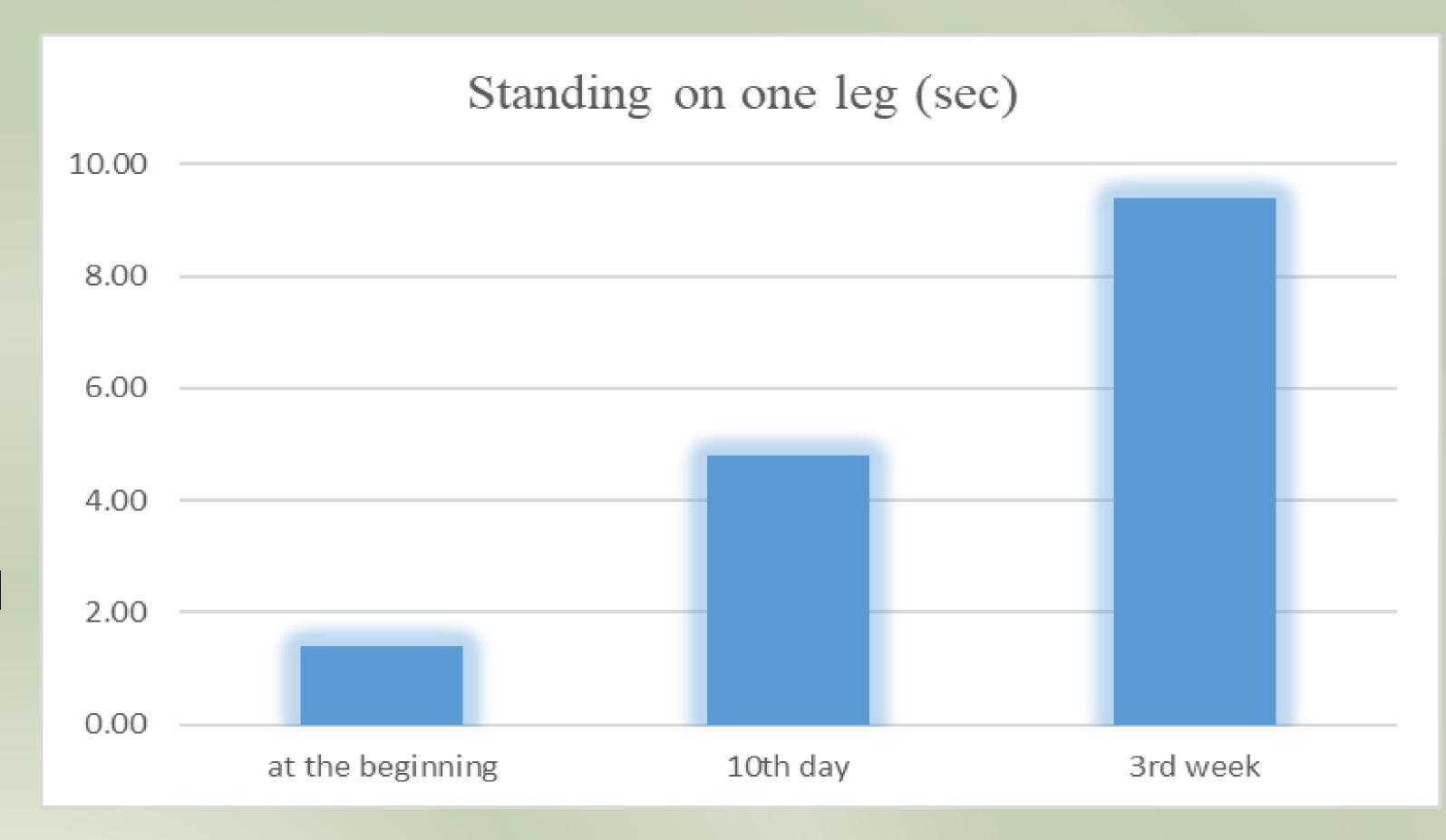
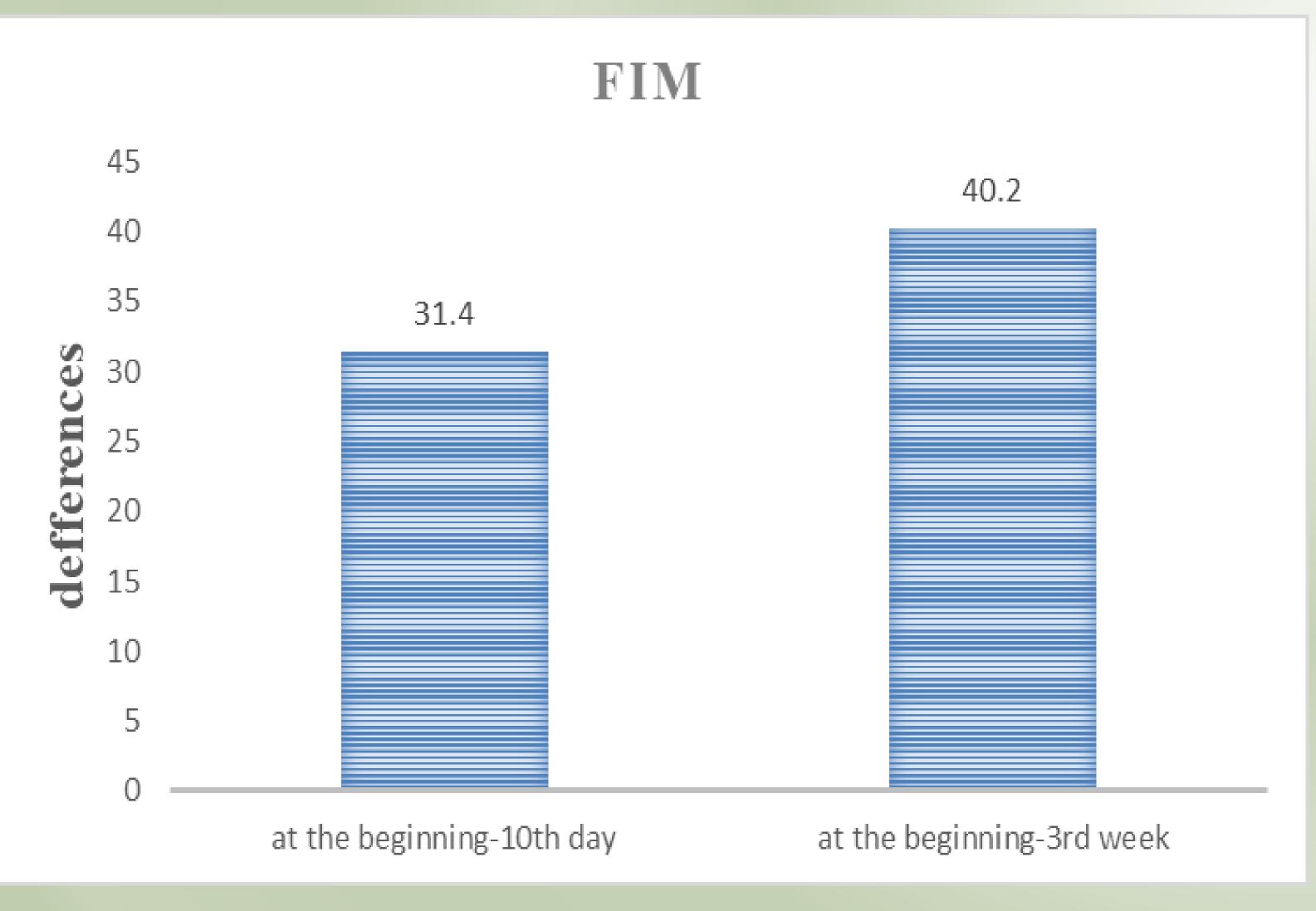


Fig. 1: Measuring how long can a patient stand on one leg (in seconds) with their hands on their chest and gaze forward



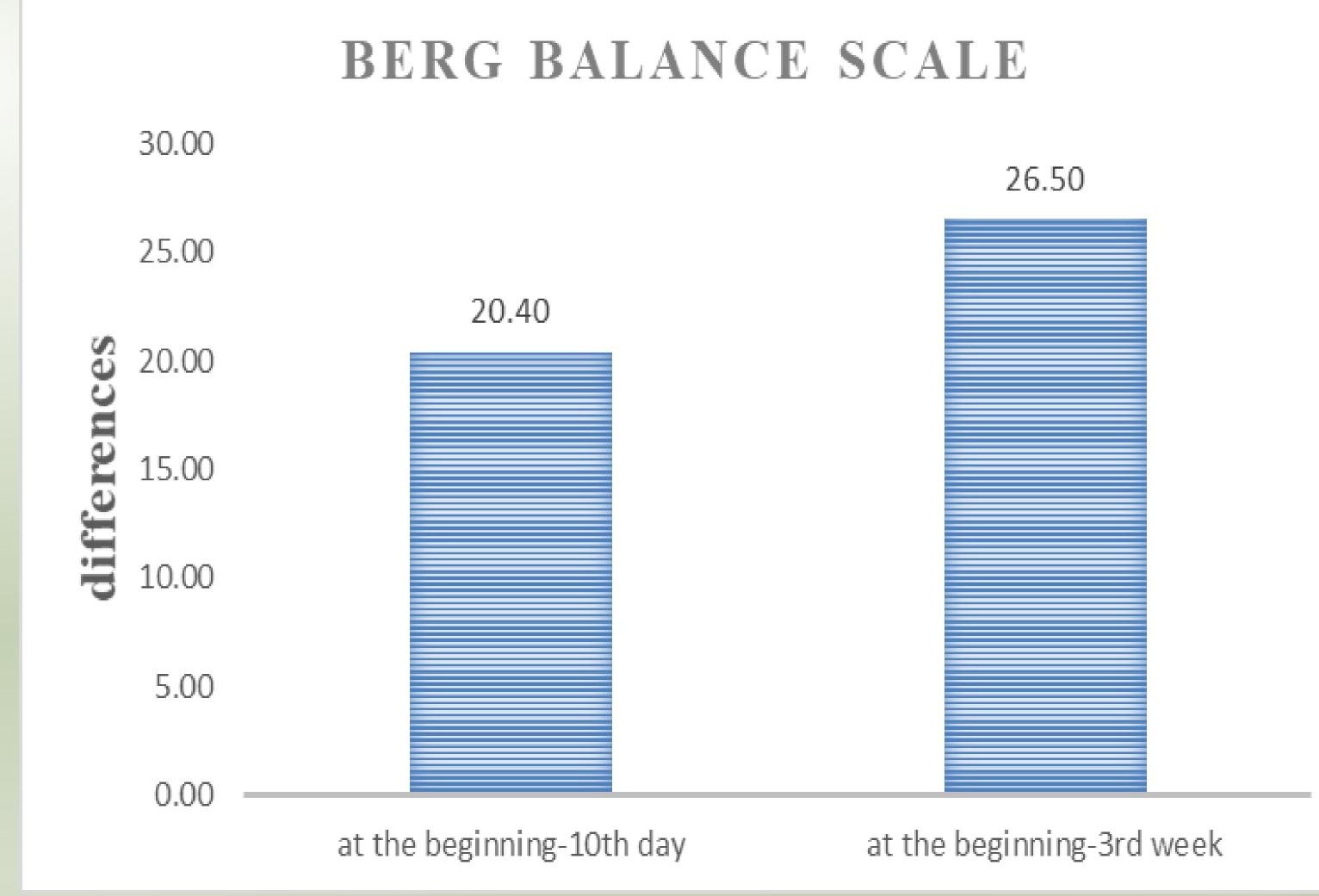


Fig. 2 Functional independence measure scores of patients with supratentorial unilateral stroke measured at the beginning of the  $10^{th}$  day and at the beginning of the  $3^{rd}$  week.

Fig.3 Berg Balance Scale scores of patients with supratentorial unilateral stroke measured at the beginning of the 10th day and at the beginning of the 3rd week.

**Results:** After 3 weeks of kinesitherapy an improvement in the body posture and functional capacity of patients with MS was found, with a significance level of p <0.001. It is recommended that the treatment should be continued at home.

**Conclusion:** The administration of 3-week kinesitherapy improves the balance capabilities and functional independence of patients with MS compared to their baseline condition.

Key words: multiple sclerosis, exercise.