1.84

Discussion.– The stroke patients may be benefit from elastic taping on obstacle crossing. The potential applications of elastic taping will be discussed.

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Impact of physical treatment and medicamentous therapy on muscle strength in subjects with lower bone density

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Keywords: Osteoporosis; Muscle strength; Medicament and physical spa therapy

Introduction.– Important parameters for functional assessment of muscles of the trunk are: quantification of muscle strength, range of motion and endurance.

Material and method.– One hundred and twenty-five postmenopausal women with lower bone mineral density were included and were treated with prescribed medicament and physical spa therapy for six months.

Results.– In the group without therapy during six months with average T-score = -2.3, reduction in muscle strength and mobility in the LS part of the spinal column of 15.47% was noticed. The second group with average T-score = -2.4 was treated with physical spa therapy. After six months, muscle strength and mobility in the LS part was increased by 17.92%, especially in contraction of extensors by 28.43%. Third group with average T-score = -2.7 was treated with calcium and vitamin D3. In the last group with average T-score = -2.88 and the increase of muscle strength and mobility in the LS part was far more than 35%.

Conclusion.– With the application of the prescribed medicament and physical spa therapy in subjects with the lower bone mineral density, there is statistically significant increase of muscle strength and functional mobility in the LS part of the spinal column, independent of age, duration of disease and level of bone mineral density reduction.

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