

QUALITY OF LIFE IN WOMEN WITH OSTEOPOROTIC FRACTURE ON THE SPINE AFTER ONE YEAR EXERCISE

Koevska, V., Mitrevska, B., Cjerakaroska –Savevska, C., Gocevska, M., Kalcovska, B.,
Manoleva, M.

Institute for Physical Medicine and Rehabilitation, Medical faculty, University "Ss. Cyril and
Methodius"- Skopje, R.N. Macedonia

Aim: Women with PO often have a low energy fracture of the spine throughout their lives. Clinically manifested by pain and deformity of the spine, which can lead to decreased physical activity. Patients are more limited in performing everyday activities and their social activities. If appropriate therapeutic procedures are not taken, this can lead to worsening their quality of life. The aim of this study was to examine the effect of physical therapy on the quality of life in patients with osteoporotic fracture of the spine after one year follow-up.

Material-Method: 92 patients, randomly selected, with diagnosed osteoporotic fracture of the spine, that were treated 12 months at the IPMR-Skopje. The first three weeks for pain received physical modalities and pain killers. None of the patients had previous surgical treatment of osteoporotic fracture of the spine. The exercise program consisted of aerobic and isometric exercises for paravertebral, abdominal and upper and lower extremity muscles, coordination and balance exercises. Patients regularly took bisphosphonates, calcium and vitamin D. Quality of life was determined by the specific Qualiffo-41 questionnaire at the beginning and after one year. Patients were mean age 60.64 ± 6.7 years, and 48.91% of them had completed secondary education. The difference in average BMI at admission and after one year was not statistically significant ($p = 0.7$).

Results: The score of the Qualeffo-41 questionnaire showed significant improvement in patients in the domain of pain (0.00003), physical function ($p=0.003$), social activation ($p=0.043$) and perception for their own health ($p=0.021$).

Variable		(mean \pm SD)	min-max	p variable
Pain $p=0.00003^{**}$	reception	55.31 ± 22.1	0 – 100	$t=4.4$
	Control	43.66 ± 24.4	0 – 100	
Physical function	reception	34.86 ± 18.9	0 – 80	$t=3.07$ $p=0.003^{**}$
	Control	27.09 ± 18.9	0 – 86	
Social activate	reception	49.54 ± 25.7	0 – 100	$t=2.05$ $p=0.043^{*}$
	Control	42.91 ± 28.7	0 – 100	
Mental reception	reception	62.59 ± 24.7	1– 100	$t=2.35$ $p=0.021^{*}$
	Control	54.99 ± 26.9	1 – 100	
Perception of own health	reception	41.81 ± 11.6	16 – 78	$t=1.35$ $p=0.18$
	Control	39.97 ± 9.7	22 – 70	

Conclusions: The physical therapy consisting of physical procedures and specific exercise program reduces the pain and improves the quality of life in female patients with osteoporotic spinal fracture. In the treatment, except drug therapy and proper nutrition, suitable program of exercise is necessary.