An investigation of the effective parameters on the lower back pain

abstract

Lower back pain is most prevalent during our young and middle adult lives. Eighty percent of the population will experience an episode of pain during their lifetime. Recently some exercises are prescribed by physical therapists based on the patient's lordosis. Therefore, the aim of this study is to investigate the relationship between LBP and lumbar lordosis in the students (21±2.3 years old). Lumbar lordosis with adjustable ruler, pelvic tilt with tilt-meter and scoliosis, flat foot and shoulder drop with clinical examination have been studied. For determining the reproducibility, each test has been repeated after 5 minutes.

The results have been shown that there were 21.5% scoliosis, 34% shoulder drop, 25% flat foot and 12.5% lateral pelvic tilt. Also, 15.6% of subjects have been suffering from LBP. In addition, correlation between lumbar lordosis and pelvic tilt was 43% that supported the results of previous studies. The results of this study have not shown any significant differences of lumbar lordosis between normal and LBP subjects. On the other hand, mean of lumbar lordosis in subjects with scoliosis was more than able-bodied subjects. Otherwise, in back pain subjects with shoulder drop and flat foot, hypolordosis has seen.

Therefore, we concluded that to describe the exercise program based on lumbar lordosis needs more study.

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Key words: Lower back pain / Scoliosis / Lordosis / Exercise therapy