

Comparison between three common remedial exercises in pain severity of patients with mechanical CLBP (A CLINICAL TRIAL)

Abstract

Objective: *The aim of this study was to determine the efficacy of three common remedial exercises and then compare them in severity of pain and OSWQ in patients with chronic low back pain.*

Methods: *25 patients with same as level of physical activity and history of mechanical low back pain during 6-12 months ago invited to participate to this clinical trial. After routine physical exam severity of pain and disability due to LBP was evaluated with VAS and Oswestry questionnaire (OSWQ) respectively.*

Patients distribute to three sub group (stabilization exercise=10 patients, Williams exercise=8 patients, McKenzie exercise=7 patients). Means difference of pain score and OSWQ (disability index) in all groups wasn't significant. Patients had down exercises according to name of their group during 12 weeks. At first all groups performed a complete set of exercises every day in 6 weeks. Then second 6 week exercises had down every other day (3 days in week). After testing the repeat ability of the parameters reassessment of parameters was performed at the end of every 3 week.

Results: *Data analysis was done with SPSS software. Friedman, Wilcoxon tests for determination and analysis of data in three groups and then Kruskal Wallis test and Mann-Whitney was done for determination of differences between three groups. Data showed that all exercise regimen can decrease of pain and disability index. ($P < 0.0001$) though decrease of pain and OSWQ in stabilization group was faster than the other groups. ($P < 0.05$)*

Conclusion: *All exercise regimen due to their strengthening properties and special effects on muscles and joints of lumbopelvic region can decrease of severity of pain even acute pain. But according to the effect of pain chronicity to surrounding tissues and receptors of lumbopelvic region and also central effect of pain (reorganization of motor cortex), which exercise can more effect than the other to this parameters that can more and more affect the surrounding tissues and receptors of lumbopelvic region so in the long time stabilization exercise according to activate inhibited local stabilizing muscles and then global muscle in stable position and unstable position can more effective than the other exercise regimens.*

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