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Spinal HVLA-Manipulation in Acute Nonspecific LBP: A Double Blinded Randomized Controlled Trial in Comparison With Diclofenac and Placebo.

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Source:

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Abstract:

Study Design. A randomized double blinded placebo-controlled parallel trial with three arms.

Objective: To investigate in acute non-specific low back pain (LBP) the effectiveness of spinal high-velocity-low-amplitude (HVLA) manipulation compared with the non-steroidal anti-inflammatory drug (NSAID) diclofenac and with placebo.

Summary of Background Data: LBP is an important economical factor in all industrialized countries. Few studies have evaluated the effectiveness of spinal manipulation in comparison to NSAIDs or placebo regarding satisfaction and function of the patient, off-work time and rescue medication.

Methods: A total of 101 patients with acute LBP (<48 h) were recruited from 5 outpatient practices, exclusion criteria were numerous and strict. The subjects were randomized to three groups: 1. spinal manipulation and placebo-diclofenac, 2. sham manipulation and diclofenac, 3. sham manipulation and placebo-diclofenac. Outcomes registered by a second and blinded investigator included self-rated physical disability, function (SF-12), off-work time and rescue medication between baseline and 12 weeks after randomization.

Results: 37 subjects received spinal manipulation, 38 Diclofenac and 25 no active treatment. The placebo group with a high number of drop outs for unsustainable pain was closed praecox. Comparing the two active arms with the placebo group the intervention groups were significantly superior to the control group. 93 subjects were analyzed in the ITT-collective. Comparing the two intervention groups, the manipulation group was significantly better than the Diclofenac group (Mann Whitney test: $P = 0,0134$). No adverse effects or harms were registered.

Conclusion: In a subgroup of patients with acute non-specific LBP spinal manipulation was significantly better than NSAID Diclofenac and clinically superior to placebo.