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Phasic exercises for cervical rehabilitation after "whiplash" trauma.

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OBJECTIVE: To assess whether "phasic" exercises, including rapid eye-head-neck-arm movements, can benefit patients with chronic cervical injuries. DESIGN: A randomized, controlled, double blind study involving 30 chronic patients, who were allocated to either group 1 or group 2. The study period was for 8 wk. SETTING: The study

was conducted in a private practice. PATIENTS: Thirty chronic motor vehicle accident patients who continued to

experience increased pain/soreness/stiffness of the cervical musculature with sports/activities requiring rapid

head neck movements were selected for the study. INTERVENTION: Group 1 patients (n = 15) had standard

exercises (stretching/isometric/isokinetic) and chiropractic therapy. Group 2 patients (n = 15) had "phasic"

exercises and chiropractic therapy. Patients in both groups exercised for a minimum of four times weekly, for 8

wk. MAIN OUTCOME MEASURE: Pre and Post Pain and Disability Index was administered to both groups.

RESULTS: Group 1, which had standard exercises and chiropractic therapy, improved by 7.4% (p > .05). Group

2, which had "phasic" exercises and chiropractic therapy, improved by 48.3% (p > .001). Confounders were

identified, which explains the minimal improvement of group 1 and the remarkable results of group 2.

CONCLUSIONS: It would appear that any rehabilitation program for chronic neck-injured patients should involve

exercises that address the following: eye-head-neck-arm coordinated movements, coordination of the entire

vertebral column,/ and return the "phasic" component of the musculature to functional levels. Additional studies

will address the effect of these exercises on the strength, range of motion and pain improvement of the cervical

spine in normal, acute and chronic patients.

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