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Introduction.

Fascial tissue contains contractile elements enabling a modulating role in force generation and mechano-sensory fine-tuning. Spontaneous regulation of fascial stiffness over a time period ranging from minutes to hours contributes actively to musculoskeletal dynamic movement control. Imbalance of this regulatory mechanism results in modifications of myofascial tonus, or diminished proprioception and neuromuscular coordination, which are key contributors to the patho-mechanisms of several musculoskeletal pathologies and pain syndromes. Aquatic exercise training is commonly recommended in different pathological conditions, and aquatic therapy is been shown to be effective in musculoskeletal pain reduction. The fascial tissues can be felt very well in the aquatic environment and, once deprived of gravity, in the
absence of muscular contractions, those same tissues bring the body into a neutral tension position.

**Methods.**

63 subjects of either gender between the ages of 20 and 65, with Chronic Low Back Pain with radiologic diagnosis of spondylolisthesis (1° and 2° Meyerding scale) were randomly assigned to 1 of 2 groups: Aquatic Manual Therapy Group (n=31), Control Group (n=32). Each subject received 30 treatments within 10 weeks, 40 minutes each treatment.

Treatments performed:

**AMT Group:** passive lumbar fascial tissue manipulation and joint mobilization; active assisted stabilizing exercises.

**Control Group:** specific stabilizing exercise and application of local pain relieving methods: heat, massage, and ultrasound.

Outcome measures obtained at baseline, after treatment, 6 and 12 months follow-up consisted of McGill Pain Questionnaire, Oswestry Disability Questionnaire and Faces Pain Scale.

**Results and Discussion.**

60 subjects completed the study (95%). Statistically significant differences were noted after treatment and at 6-12 months follow-up (p<0.05). The AMT group had less
intense pain (90%), decreased the quantity of disability (96%) and increased tolerability of treatment (60%) compared with the Control Group. Clinical significance was evident for the AMT group, At 12-month follow-up 83.4% of subjects in the AMT group reported of pain reduction as compared with 20% of subject in the Control Group that reported of pain reduction.

**Conclusions.**

Aquatic therapeutic manipulation of soft tissues appears to be a well tolerable technique and improves perceived well-being outcomes.