P55 - THE EFFECT OF A SELF MOBILIZING EXERCISE ON LONG DORSAL LIGAMENT PAIN

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Introduction

In 1995 R.L. DonTigny introduced self-mobilizing exercises (SME) to correct counter nutated sacro-iliac (SI) joints. He assumed that pain originates from the deep origin of the gluteus maximus muscle and the long dorsal sacroiliac ligament (LDL). The effect of this SME was never substantiated by scientific data. In 2002 Vleeming et al. introduced the LDL palpation test. In this study 76% of peripartum pelvic pain patients showed tenderness of the long dorsal ligament. They assumed a relationship between a positive LDL test and counter-nutation of the SI joint. Therefore, this study focuses on the question whether a specific exercise aimed at mobilizing the SI-joint to nutation diminishes long dorsal sacroiliac ligament pain.

Purpose/Aim

The aim of this study is to investigate the effect of a SME of the SI joint to nutation on LDL pain.

Materials and Methods

From a Dutch outpatient rehabilitation clinic, specialized in chronic low back, neck and pelvic pain, patients starting treatment were included from October 2012 to March 2013. Patients with serious structural pathology were excluded. All patients with a positive LDL were randomly assigned to SME or placebo exercise (PE). Effect on the LDL score and pain intensity (on a visual analoque scale) were evaluated for SME and PE.

Results

From 194 patients starting treatment 60 were excluded (41 had a negative LDL test and 19 subjects had incomplete data). SME n=74 and PE n= 60. Mean LDL score for SME decreased from 3.2 ±1.6 to 2.8± 1.7 (P=0.01) and increased in PE from 3.2±1.7 to 3.5±1.7. Although for many subjects in both groups (PE 60% and SME 51,4% the LDL score remained unchanged. Pain intensity on a visual analogue scale did not change in both groups.

Relevance

This study is the first step in determining the usefulness of the SME on LDL-pain and consequently, mobilization of the SI joint.

Conclusions

The SME has a positive effect on the LDL test in some patients. Physiotherapists may consider using SME to diminish tenderness of the LDL.

Discussion

The underlying mechanism, influencing the LDL test, needs further study. Especially why some patients do and others do not respond to SME. This study is based on subjective experience of the subjects.

Implications

Properly understanding of the effect of SME on LDL pain.