

The role of fascia in pelvic movement control

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INTRODUCTION

Fascia is the unifying element of the body and it is able to modify its consistency and elasticity under stress. Muscle contraction tensions the fascia which is one of the key elements in pelvic force closure. Fascia acts as a coordinating component of the motor units and uniting element between uni/multidirectional muscle chains. This means that the mechanical unifying component is also the coordinating component that seems to have a unique role in the movement control and support of the pelvic girdle. Impaired movement control has been associated with posterior pelvic pain and turns up as an increased lateral shift of the pelvis during single leg stance.

Measurement of pelvic lateral shift during one leg stance before and after normalizing the fascial function was carried out with patients having dysfunction in lumbar-pelvis and/or lower extremity.

METHODS

The study group consisted of 14 female and 6 male patients whose mean age was 45,2 years (18-69).

The dysfunctional or/and painful body areas lumbar (12), pelvis(2), hip (4), knee (2) and ankle (4). They were tested with single leg stance test and found to have asymmetry in the lateral pelvic movement.

The patients were evaluated and treated by the Fascial Manipulation® method.

RESULTS

There was no statistically significant difference between females and males in the lateral shift of the pelvis on the healthy side and females and males were analysed together as one study group(N=20). On the baseline the mean lateral shift of the pelvis on the asymptomatic side was 42,85mm and on the symptomatic side 62,60mm. After Fascial Manipulation® treatment there was a mean change of 15,2mm on the lateral shift of the pelvis on the symptomatic side ($p = 0.013$) and on the asymptomatic side the change was 2,7mm ($p=0.095$).

DISCUSSION

This pilot study indicates that restoring the fascia's ability to glide and tension has an impact on the movement control of the pelvis. The measurements of the lateral shift of the pelvis during single leg stance that were done before and after show a change towards symmetrical movement which means a change in the muscle recruitment and synergistic function. Restoring the normal functioning of the fascia may help to prevent further stress and strain and pain of the pelvic structures.