Efficacy and research of extracorporeal shock wave therapy in the treatment of main postural muscles (Comparison of MET and ESWT)

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Device and producing company:
Duolith (Storz Medical)

Introduction:
MET (Muscle Energy Techniques) has been reported to be effective for reducing pain intensity and disability in subjects suffering with low back pain (LBP).

Methods:
We applied combined ESWT (focussed and non-focussed shock waves) to 26 patients with acute LBP (less than 12 weeks duration) for about 4 weeks (4-7 sessions).
Patients were diagnosed and included with a segmental flexion restriction (extended, ipsilaterally rotated and side-bent - ERS dysfunction). They were excluded if they had radiating pain, motor weakness, absent reflexes, previous back surgery, or chronic pain of more than 12 weeks duration. Patients assigned into the matched MET control group received a specific MET program for lumbal dysfunction. Both groups were given a home exercise program. All patients were seen twice a week for 4 weeks. All patients then performed a strengthening exercise program supervised by an instructor of our rehabilitation center who was blinded to the treatment allocation.

Results:
Those patients treated with ESWT (according to the anatomy trains of MYERS) showed a significantly higher change in the Disability Index scores. The spinal ROM (side lying passive ROM) was higher in the ESWT group than in the matched control patients.

Discussion:
This study supports the use and effectiveness of ESWT on spinal pain to increase spinal ROM and improve clinical indicators of pain and disability.

Conclusion: Further investigation of duration of these effects and the clinical benefit to symptomatic individuals is needed.