

Radial Shockwaves in The Treatment of Chronic Gluteal trigger points as a common source of pseudosciatic pain and their therapy with radial shockwaves.

Authors:

M. Gleitz

Institution:

Orthopaedic office, 3 rue des Capucins, L-1313 Luxembourg

Introduction:

Patients with chronic low back pain often complain about irradiation in their legs although they have no objective neurologic deficit. These irradiations are called "pseudosciatic" and mostly explained by the muscle triggerpoint theory of Travell & Simons. Pseudosciatic pain is due to trigger points in the gluteal muscles.

The triggerpoint theory further includes the possibility of secondary insertion tendonitis due to an increase of intramuscular tension over longer periods.

In this clinical study the frequency and localisation of musculotendinous pathologies amongst chronic low back pain patients were examined and the results of a radial shockwave therapy described.

Material and method:

In a group of 184 patients with chronic pseudosciatic pain (>12 months) the gluteal muscles and their insertion at the ilium and the greater trochanter were examined by palpation and the correlation to the duration of pain calculated (1 examiner).

The triggerpoint areas in the gluteal muscles were treated with radial shockwaves (Masterpuls, Storz) during 6-8 sessions and the result of therapy documented over 6 months.

Results:

92% of all patients with chronic pseudosciatic pain showed trigger points in the gluteal muscles and described a typical referred pain in the lower extremities during high pressure on these areas. Amongst these 184 patients 61% showed muscular trigger points only (average pain duration 1.8 years, VAS 7.3), whereas additional insertion tendopathies were found in 31% of the patients (average pain duration 3.7 years, VAS 7.6). The difference in pain duration was statistically significant ($p < 0.01$), whereas the intensity of pain was not.

The treatment with radial shockwaves resulted in a significant reduction of pain after 6 months in the subgroup of pure muscular triggerpoints in 84% of patients (VAS 1.9) and a relief of the referred pain in 69%. In the subgroup with additional insertion tendopathies only 49% of patients profited from the trigger shockwave therapy (VAS 3.4) and described a relief of the pseudosciatic pain in 35%.

Conclusion:

Muscular gluteal trigger points are a common source of pseudosciatic low back pain and are a risk factor for secondary insertion tendopathies. Whereas muscular trigger points respond well to the radial shockwave therapy, insertion tendopathies do not improve equally. Under practical considerations we recommend an early shockwave treatment of muscular trigger points in patients with pseudosciatic low back pain.