

Oral presentation

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A simple functional classification for unspecific chronic low back pain with special respect to the sagittal plane

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Background

Up until now, chronic low back pain without radicular symptoms were not classified and attributed in the international literature as being "unspecific". For specific bracing of this group of patients suffering from low back pain we use simple physical tests to predict the brace type the patient might benefit from. Based on these physical tests we have developed a simple functional classification of "unspecific" low back pain in patients with spinal deformities.

Materials and methods

Between January 2006 and July 2007 we tested 133 patients (116 females and 14 males) with spinal deformities (average age 45 years, ranging from 14 years to 69) and chronic unspecific low back pain (pain for > 24 months). We applied the "sagittal realignment test" (SRT), a lumbar hyperextension test, and the "sagittal delordosation test" (SDT). Results: 117 Patients reported significant pain relief in the SRT and 13 in the SDT (≥ 2 steps in the Roland & Morris VRS). Three patients had no significant pain release in both of the tests (< 2 steps in the Roland & Morris VRS). Pain intensity was high (3.29) before performing the physical tests (VRS-scale 0-5) and low (1.37) while performing the physical test for the whole sample of patients. The differences were highly significant in the Wilcoxon test ($z = -3.79$; $p < 0.0001$).

Discussion

With the exception of three patients (2.3%) a clear distribution to one of the two classes has been possible. One hundred seventeen patients were supplied successfully with a sagittal realignment brace (physio-logic brace™) and 13 with a sagittal delordosation brace (spondylogic® brace). Therefore a clear distribution of the patients from this sample to a treatment plan that included either chronic postural or chronic instability back pain was possible. In 2.3% a combined chronic low back pain from the findings obtained seems reasonable to assume.

Conclusion

Chronic unspecific low back pain can be clearly classified using these physical characteristics. This functional classification is necessary to decide on which specific conservative approach (physical therapy, braces) should be used. Factors other than spinal deformities contribute to chronic low back pain.