Efficacy of paravertebral infiltrations and interferential currents in patients with low back pain and lumbo-sacral radiculopathy

Ivet Koleva1 and Radoslav Yoshinov2
1Medical University of Sofia, Bulgaria
2Bulgarian Academy of Sciences, Bulgaria

Objective: The objective of this study was to compare the efficacy of paravertebral infiltrations and a rehabilitation programme (including interferential currents) in patients with low back pain and lumbo-sacral radiculopathy.

Material & Methods: A total of 105 patients (divided into three groups) with this pathology were treated during 20 days. All patients received patient education (back school). Patients of first group received paravertebral infiltrations with corticosteroids and vitamin B. In group 3, we applied physiotherapy (analytic exercises and soft tissue techniques) and interferential currents (longitudinally on the respective lower extremity). In group 2, we combined both methods: Paravertebral infiltrations and rehabilitation procedures. Patients were controlled before, during, at the end of the PRM course and one month later - using visual analogue scale of pain, Lassegue’s sign, scales of Zung for depression and anxiety. Statistical analysis was performed with SPSS electronic package, version 17. We applied options for two samples comparison with parametrical analysis of variances ANOVA and non-parametrical distribution and correlation analysis: t-test, Signed rank test, Kolmogorov – Smirnov test, Mann – Whitney W test. The treatment difference was considered to be statistically significant if the p value was < 0.05.

Analysis of results: Results demonstrate the efficacy of medication and rehabilitation in all patients. Medication is most effective during first week, but the complex rehabilitation programme has stable and durable effects on positive sensory signs and psychological patterns.

Discussion & Conclusion: We consider that combination of medication (paravertebral infiltrations) and rehabilitation (physiotherapy and interferential currents) is most effective for these patients.

Biography
Ivet Koleva is a Medical Doctor and Specialist in Neurology and in Physical & Rehabilitation Medicine from the Medical University of Sofia, Bulgaria with 30 years of clinical practice in the domain of Neurorehabilitation. She has completed a PhD thesis on “Physical Prevention and Therapy of Diabetic Polyneuropathy” and a thesis for Doctor of Medical Sciences on “Neurorehabilitation in Patients with Socially Important Neurological Diseases”. She received the titles of Associate Professor (2006) and Professor (2010) in Physical & Rehabilitation Medicine. Actually, she is Professor at the Medical University of Sofia, Bulgaria.

yvette@cc.bas.bg