Amelioration Rates, Side Effects, and Satisfaction of Steroid Infiltrations of the Cervical and Lumbar Spine - How Effective Are They in Daily Life?

Huber Joerg, Mischler Andreas

Presented at: Annual Meeting Swiss Orthopedics 27.06.2025

Introduction: Therapeutic infiltrations of the cervical and lumbar spine are simple and frequently performed treatments. The objectives of therapeutic infiltration are twofold: first, to reduce symptoms with minimal side effects; and second, to achieve satisfaction with the treatment. These objectives can be measured new directly with a questionnaire; however, there are few studies using this method. The aim of this study was to measure the individual efficacy rate (reduction of symptoms), rate of side effects, and satisfaction after therapeutic infiltrations of the cervical and lumbar spine.

Methods: This prospective cohort study enrolled patients with therapeutic infiltration of the cervical and lumbar spine on a consecutive basis. Each patient had a therapeutic infiltration performed under image-intensifier control or CT control. The patients received an outcome questionnaire (Pationnaire 3) asking for symptom reduction, side effects, satisfaction with treatment, and willingness to repeat the treatment.

Results: A total of 330 treatments were included in the study: 12 cervical image-intensifier, 13 cervical CT, 11 lumbar CT, 19 sacroiliac-joint image-intensifier, 12 coccyx image-intensifier, and 263 sacral blocks image-intensifier. All patients completed and returned the questionnaire. The mean interval between infiltrations and questionnaire was 2.8 days (range: 2 to 15 days). The amelioration rates were as follows: 83% for cervical image-intensifier, 92% for cervical CT, 91% for lumbar CT, 79% for sacroiliac joint image-intensifier, 50% for coccyx, and 79% for sacral blocks. The satisfaction rates were 67% for cervical image-intensifier, 31% for cervical CT, 73% for lumbar CT, 74% for sacroiliac-joint image-intensifier, 33% for coccyx, and 65% for sacral blocks. The rates of willingness to repeat were 92% for cervical image-intensifier, 69% for cervical CT, 82% for lumbar CT, 58% for sacroiliac-joint image-intensifier, 50% for coccyx, and 70% for sacral blocks.

Conclusion: The amelioration rates range from 50% for coccyx injections to 92% for cervical CT guided infiltrations. Adverse effects were predominantly observed in cases involving image-intensifier and no cases for CT-guided infiltrations. The satisfaction rate was found to be lower than the efficacy rate, a discrepancy that can be attributed to varied expectations, the discomfort associated with infiltration (cervical CT), and other contributing factors. Therapeutic infiltrations for the cervical and lumbar spine demonstrate high amelioration rates.