

# EFFECTIVENESS OF A LUMBAR BELT IN SUBACUTE LOW BACK PAIN: AN OPEN, MULTICENTRIC, AND RANDOMIZED CLINICAL STUDY

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## **Abstract**

**STUDY DESIGN:** Multicentric, randomized, and controlled study of clinical evaluation of medical device in subacute low back pain. **OBJECTIVE:** To evaluate the effects of an elastic lumbar belt on functional capacity, pain intensity in low back pain treatment, and the benefice on medical cost. **SUMMARY OF BACKGROUND DATA:** There is limited evidence of efficiency of lumbar supports for treatment of low back pain. There is also a lack of the methodology in the studies reported on the efficiency of this device. **METHODS:** This study is randomized, multicentric, and controlled with 2 groups: a patient group treated with a lumbar belt (BWG) and a control group (CG). The main criteria of clinical evaluation were the physical restoration assessed with the EIFEL scale, the pain assessed by a visual analogic scale, the main economical criteria was the overall cost of associated medical treatments. **RESULTS:** One hundred ninety-seven patients have participated. The results show a higher decrease in EIFEL score in BWG than CG between days 0 and 90 (7.6 +/- 4.4 vs. de 6.1 +/- 4.7; P = 0.023). Respectively significant reduction in visual analogic scale was also noticed (41.5 +/- 21.4 vs. 32.0 +/- 20; P = 0.002). Pharmacologic consumption decreased at D90 (the proportion of patients who did not take any medication in BWG is 60.8% vs. 40% in CG; P = 0.029). **CONCLUSION:** Lumbar belt wearing is consequent in subacute low back pain to improve significantly the functional status, the pain level, and the pharmacologic consumption. This study may be useful to underline the interest of lumbar support as a complementary and nonpharmacologic treatment beside the classic medication use in low back pain treatment.

## **SELECTED QUOTATIONS**

### **Medication Consumption**

“There was a significant difference of the medication consumption between WBG [Wearing Brace Group] and CG [Control Group]...so that WBG consumed far fewer medication treatments than CG.” (Pg. 219)

### **Discussion**

“The results of this study show that wearing a lumbar belt in the subacute low back pain is benefic for functional recovery, pain intensity control, and medication consumption.” (Pg.219)

“...wearing belt is a complementary and not the primary treatment of back pain. In regards with different treatments proposed for low back pain, it is also interesting to underline that lumbar belt wearing does not induce secondary or iatrogenic effects and that there is no contraindication, which can induce some preferences to a belt wearing than more aggressive therapy.

In conclusion, this study reports significant results of the clinical and functional benefices to wearing a tissue belt as a complementary treatment of subacute low back pain with a significant decrease of medication consumption.” (Pg. 220)