

Effectiveness of flexible lumbar support provided by the *Thuasne Lomba-Cross Activity* support belt in the treatment of subacute low back pain

Abstract

Objective:

To evaluate the effects of a flexible lumbar belt in low back pain treatment based on criteria of clinical effectiveness (functional capacity and pain) and economic benefit.

Patients

197 patients suffering from subacute low back pain and treated for 90 days (follow-up period) by 44 general practitioners.

Methods:

A randomized, multicentric, prospective, controlled study with two groups: one patient group treated with a *Lomba-Cross Activity*® lumbar belt (TG) and a control group (CG). The main clinical evaluation criterion is physical recovery evaluated with the EIFEL scale. The main economic criterion is the cost of associated treatment.

Results:

The EIFEL score reduced by 5.4 ± 4.16 for the TG *compared with* 4.0 ± 4.32 for the CG ($p=0.022$) between D0 and D30 and by 7.6 ± 4.48 for the TG *compared with* 6.1 ± 4.73 for the CG ($p=0.023$) between D0 and D90. A favourable change in the Visual Analogic Scale (VAS) was also noted for the TG over the corresponding dates. A significant difference exists, in favour of the TG, between the change in medication intake of the TG compared to the CG over the periods D0-D30 and D30-D90 and with an identical effect on other treatments and total costs per patient.

Conclusion:

Wearing a *Lomba-Cross Activity*® lumbar belt for subacute low back pain significantly improves the functional status (EIFEL score) and pain suffered (VAS). It reduces medication intake and medical costs at 30 and 90 days. This study emphasises the benefit of a non-pharmacological approach in conjunction with the classical approach to low back pain treatment.

Key words:

Low back pain. Lumbar belt. Pain. Functional evaluation. Economic evaluation.