

Effect of a high efficiency cognitive behavioural treatment with exercises for Chronic Low Back Pain: a retrospective controlled trial with long term follow up

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1 Introduction

Cognitive behavioural treatment with exercises is considered the gold standard for chronic low back pain (cLBP). There are different approaches in the literature, but they usually include long term outpatient (> 100 hours) or inpatient multiprofessional treatments.

Aim: verify the efficacy of a high efficiency cognitive behavioural treatment with exercises for cLBP and the influence of initial disability on the final result.

2 Methods

Study design: retrospective controlled study with 5 years follow up.

76 (34 females) consecutive cLBP patients were included. All the patients underwent a treatment consisting of specific exercises and cognitive behavioural treatment. The patients met an expert and trained physiotherapist 6 times, once every month during a 90 minutes session. After a specific evaluation the patient learned specific exercises to be practiced every day at home for 20-30 minutes. The exercises were modified every time by the therapist who administrated also the cognitive behavioural treatment.

Outcome measures: Roland Morris Disability Questionnaire (RM), VAS, Fear avoidance believe questionnaire. We evaluated the number of patients changed of more than 3 point for RM and more than 2 for VAS as improved/worsened.

The scales were administered at the beginning and the end of treatment. The patients were called telephonically after 5 years to verify the maintenance of results.

According to the Italian guidelines cLBP patients were divided in "High Disability" (HD) for score of RM 14, and "Low Disability" (LD) if < 14.

Statistical analysis: Mann Whitney, chi-square.

3 Results

16 patients were HD, 60 LD.

The whole population had a median improvement of 3 points for RM. For high disability patients the median improvement was 6 vs 2 for Low. Considering the number on changed patients we had 75% improved and 25% stable for HD vs 38.3% and 58.3% and 3% of worsened for LD (Fig 1). Also the VAS improved in both populations with better results for HD (Fig. 2).

4 Discussion

Our results showed an overall efficacy of the treatment.

A high efficiency cognitive behavioural treatment was effective for cLBP especially for HD patients. These results suggest the possibility to achieve good functional results in a population of cLBP with a low-cost protocol. There are different approaches in the literature, but they usually include long term outpatient (>100 hours) or inpatient multiprofessional treatments being thus quite expensive. In our protocol patients perform exercises at home, meeting the therapist only once a month. Another relevant point is that HD patients can achieve a greater improvement with respect to LD. This raises some point for future reserchs, since LD can be eventually faced with other strategies, for example manipulation and less specific exercises.

Figure 1. Percentage of changed patients significantly changed for Roland Morris questionnaire in each group. HD: High disability; LD: Low Disability

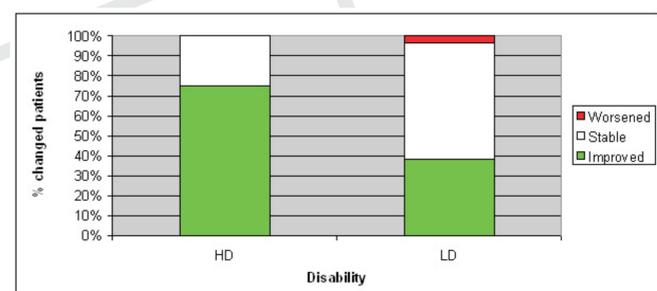
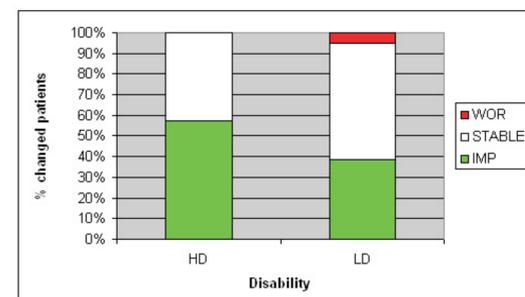


Figure 2. Percentage of changed patients significantly changed for VAS in each group. HD: High disability; LD: Low Disability



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