

BRIEF REPORT

PHYSIUM in patients with chronic low back pain not responding to previous physical treatments

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BACKGROUND: massage may be useful therapies for chronic low back pain.

OBJECTIVE: to evaluate the effectiveness of therapeutic massage administered through FISIUUM in pain reduction in chronic low back pain.

DESIGN: The study of effectiveness and safety

PARTICIPANTS: 21 patients with unstable chronic low back pain clinically confirmed complete successfully the treatment period until disappearance of pain. Patients received between 4 and 10 sessions of treatment with PHYSIUM up to pain recover

MEASUREMENTS: The study assessed the reduction of pain according to the VAS scale. Patients received between 4 and 10 sessions of treatment with PHYSIUM up to recover.

RESULTS: PHYSIUM presents a change in pain reduction of 88,89%. The most important reduction is after sessions of treatment 3 to 7.

CONCLUSION: PHYSIUM reduces lower back pain, with a very good tolerability and safety.

KEY WORDS: massage; chronic low back pain; relapse

Low back pain (LBP) is one of the most common and costly musculoskeletal problems in modern society. Its prevention is important because it is often a recurrent and sometime persistent problem.

Seventy percent to 85% of the population will experience LBP at some time in their lives and account for more than 90% of social costs for back incapacity.

At present are marketed more than 50 potential therapies promising to relieve the pain, lessen the suffering, and offer a cure for this problem. However, there is sound evidence for only a minority of these therapies.

Massage is a simple way of easing pain, while at the same time aiding relaxation and promoting a feeling of well-being and a sense of receiving good care. Soft tissue massage is thought to improve physiologic and clinical outcomes by offering the symptomatic relief of pain through physical and mental relaxation.

Massage is recognized as a safe therapeutic modality, without risks or adverse effects.

Proponents of massage therapy claim it can minimize pain and disability and speed return-to-normal function for patients with chronic nonspecific BP, especially when combined with exercises and education.

A systematic review of massage in the chronic nonspecific back pain performed by The Cochrane Collaboration conclude that massage might be beneficial, especially when combined with exercises and education (Furlan et al, 2002; Furlan et al, 2008), like other groups (Erns, 1999; Hadler et al 1987). Some systematic reviews conclude that massage produce better effects in clinical trials than in the usual care, because the application of massage has a greater variability between intra-therapist e inter-therapist in the usual practice than in clinical research where massage administration is standardised.

PHYSIUM is a non-invasive and very safe device that produces a mechanical stimulus that produces a computerized, protocollised massage by on the muscle-connective, vascular, lymphatic, and neurologic systems. That permitted to administer the same doses to all patients.

This study aims to evaluate the effectiveness of therapeutic massage administered through PHYSIUM in chronic low back pain assessed as reduction of pain.

MATERIAL & METHODS

The study was designed as an interventional, analytical, longitudinal, prospective, before-and-after trial.

Population and treatment

Twenty one patients (men, women), older than 18 years, with unstable chronic low back pain clinically confirmed and active disease with a VAS ≥ 6 points (Philadelphia panel, 2001) complete successfully the treatment period in this study.

PHYSIUM will be applied in sessions of 60 minutes once a week until back pain remission, with a minimum of 4 sessions and a maximum of 10 sessions.

Relapses and maintenance therapy will be investigated. All patients with severe chronic low back pain, degenerative process will be treated in an escalated number of progressive visits. A follow up to study maintenance treatment and relapses was assessed.

Evaluations

The primary endpoint for the evaluation of efficacy was the change in the VAS pain score (100 mm visual analogue scale [VAS]), (Collins, 1997; Hsieh, 1992) between baseline and the final examination on 4 w or later. Relapses were evaluated during the maintenance therapy and 6 month after the maintenance treatment.

RESULTS

After treatment with **PHYSIUM** patients present a VAS pain reduction of $5,6 \pm 2,0$ points (Table 1).

Table 1 PHYSIUM on average VAS pain score (0 to 100 mm VAS) in patients with BP	
Patients	(n = 21)
Baseline	6,3 \pm 1,7
Pain remission (W 4 to W 10)	5,6 \pm 2,0
% Change	88,89%

Pain disappeared in 19 (90,5%) patients. Most of patients responded between sessions 3 and 6 of treatment. 7 (33,3%) patients in session 3 and 5 (35%) patients in session 5 (Figure 1).

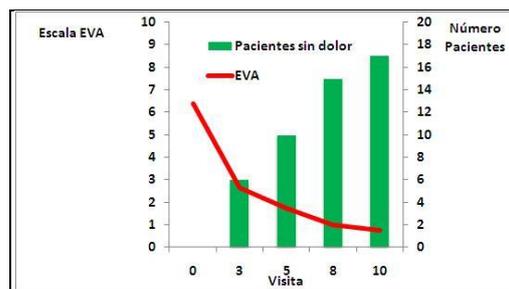


Fig 1: Pain reduction (VAS) after treatment with Physium in patients with unstable chronic low back pain

All patients who responded to the treatment received a protocollised maintenance therapy with Physium (Figure 2).

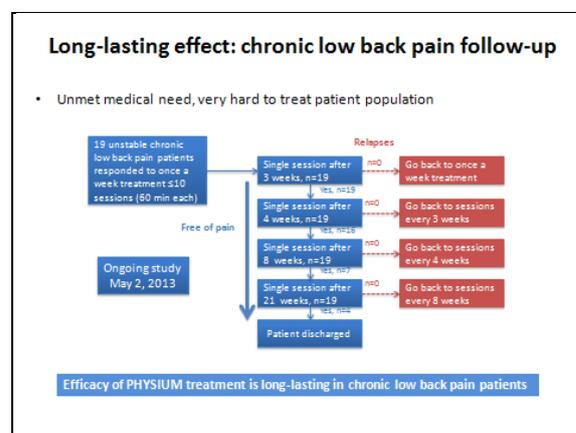


Fig 2: Long lasting effect

No patients who received the maintenance treatment relapsed. Since now no patients who finished the treatment. Patients discharged were advised to return to the consult if a pain of 2 to 4 measured in the VAS reappeared.

CONCLUSIONS

PHYSIUM administered a massage treatment that was effectiveness and safe in reduction of pain in the back pain patients.

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