NEUROREFLEXOTHERAPY IN THE TREATMENT OF NONSPECIFIC LOW BACK PAIN

SUMMARY

Introduction: Low back pain (LBP) is a very frequent disorder associated with high health-care and labour costs. While episodes are mostly non-specific, have no organic cause and are thus usually resolved within a few weeks, they can nevertheless become chronic in a small group of patients. Neuroreflexotherapy (NRT) is a minimally invasive procedure used in the treatment of non-specific LBP. It consists of the temporary implantation of epidermal devices in the ear (*pinna*) and surgical staples at certain trigger points related with the metameres clinically implicated in LBP.

Objective: To assess the efficacy, effectiveness and safety of NRT in the treatment of non-specific lower back pain in adults.

Methods: Systematic review of the scientific literature. A search was made of databases specialised in systematic reviews and clinical practice guidelines, general databases and ongoing research projects. Two reviewers, acting independently, then subjected the full text of the papers selected to critical perusal.

Results and discussion: A total of six primary studies were retrieved, comprising two randomised clinical trials of parallel groups, a community clinical trial and three case series. The trials showed that, as compared to placebo treatment, NRT proved effective in reducing (local and referred) pain and the incapacity associated with non-specific LBP, when used to complement conventional treatment. The case series similarly showed a reduction in pain and incapacity, though the results for LBP were reported together with those for cervical and dorsal pain. NRT would appear to be a safe technique, since no complications or severe adverse effects were reported. Furthermore, the community clinical trial showed it to be cost-effective. There are some points, however, that may affect its reproducibility and applicability in routine clinical practice: in terms of the intervention itself, there is neither any definition of the most appropriate duration of the treatment nor any assessment of the long-term results; the other limitation on its applicability resides in the fact that the technique has been performed by a small number of highly experienced professionals at a few specialised centres, so that the reproduction of the results in any context other than that envisaged by the studies cannot be guaranteed.

Conclusions and recommendations:
- Available scientific knowledge on neuroreflexotherapeutic intervention, as a complementary therapeutic option to conventional treatment for non-specific low back pain, is based on studies of adequate methodological quality.
- The neuroreflexotherapy has shown its efficacy and safety in the short-term treatment of adults with chronic non-specific low back pain, although the intervention was conducted in a small number of patients by a small group of very trained health professionals.

- Patients outcomes in the middle or long-term after treatment are unknown.
- There is scarce and limited evidence on the cost-effectivenness of neuroreflexotherapy, therefore conclusions can not be drawn.
- The fact that all the studies on neuroreflexotherapy interventions have been conducted by the same research team, consisting of highly specialised and experienced professionals, raises the question of neuroreflexotherapy's reproducibility in other health-care settings.
- The diffusion of neurorreflexotherapy for the treatment of non-specific low back pain remains very low and it is not used routinely. A comprehensive description of the technique, including its training programme, would facilitate its replication.
- The introduction of neurorreflexotherapy is not recommended in the public health system without having previously conducted clinical trials, where the intervention would be carried out by health professionals belonging to the public health care system duly trained in the technique, and with an adequate long term follow up, that allows for assessment of recurrence and reintervention rates.