WHOLE BODY CRYOSTIMULATION IN REHABILITATION. WHAT IS THE EVIDENCE?

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Background and Aims

Whole-body cryostimulation (WBC) is mostly used in sports for muscle recovery but it is emerging as a promising non-pharmacological intervention for a wide range of conditions (Multiple Sclerosis, Parkinson, chronic inflammatory or neuropathic pain, fibromyalgia, long Covid, spasticity). Repeated cold exposures have been shown to improve inflammation and autonomic imbalance and reduce symptoms like pain and fatigue. The treatment is safe after medical screening for recently revised contraindications. This presentation aims to provide up-to-date evidence on the benefits of WBC in various conditions of rehabilitation interest.

Methods

We will provide a narrative synthesis of the existing evidence at molecular, clinical and functional level on the use of WBC in a range of rehabilitation conditions.

Results

A synthesis of the reviews, RCTs, observational and case reports available in the literature will be provided.

Conclusion

The current state of the art suggests that WBC holds significant promise as an adjunctive therapy for several musculoskeletal, neurological and metabolic conditions of rehabilitation interest. Adverse events are rare and minor but proper medical screening and supervision is mandatory.

Keywords: whole-body, cryostimulation, rehabilitation, pain, fatigue