Better Evidence is needed for rehabilitation of persons with **Spinal Cord Injury**

Aim

To present Cochrane Evidence related to rehabilitation of persons with Spinal Cord Injury (SCI).

Methods

The Cochrane Library has been searched for Cochrane Systematic Reviews (CSRs) and Protocols (CPs) addressing the effectiveness of rehabilitation interventions in people with SCI. Articles were included if relevant to rehabilitation in SCI and irrespective of a specific intervention or outcome.

Cochrane Library Search Term: "Spinal Cord Injury"



Overall search results: 41 CSRs - 5 CPs

Key Results

- > 3 out of 4 CSRs (75%) reported inconclusive results;
- > The CSRs reported the need of randomized controlled trials (RCTs):
 - Of larger sample size (100%);
 - With long-term follow up (75%);
 - Of better methodological quality (75%).

2 Rehab CPs (Pub years: 2013-2019)

4 Rehab CSRs

(Pub years: 2000-2014)

Conclusions

The CSRs performed on rehabilitation related topics in persons with SCI are highly heterogeneous in terms of interventions and outcomes; not recently updated and few compared to other clinical conditions and most of them are inconclusive. New and better RCTs on spinal cord injury are needed and will lay the foundations for the production of new CSRs.



Evidence-Based Practice in Spinal Cord Injury: a narrative overview of Cochrane Systematic Reviews.

Kiekens C1,2, Arienti C3, Lazzarini SG3, Negrini S4,5

¹Spinal Unit. Montecatone Rehabilitation institute. Imola (BO), Italy: ²University Hospitals Leuven – KU Leuven, Leuven, Belgium ³IRCCS Fondazione Don Carlo Gnocchi, Milan, Italy; ⁴Department of Biomedical, Surgical and Dental Sciences, University of Milan "La Statale", $Italy; {}^{5}IRCCS\ Istituto\ Ortopedico\ Galeazzi,\ Milan,\ Italy.$

Cochrane Systematic Reviews

- 1. Mehrholz J, Kugler J, Pohl M. Locomotor training for walking after spinal cord injury. Cochrane Database of Systematic Reviews 2012, Issue 11. Art. No.: CD006676. DOI: 10.1002/14651858.CD006676.pub3.
- 2. Boldt I, Eriks-Hoogland I, Brinkhof MWG, de Bie R, Joggi D, von Elm Non-pharmacological interventions chronic pain in people with spinal cord injury. Cochrane Database of Systematic Reviews 2014, Issue 11. Art. No.: CD009177 10.1002/14651858.CD009177.pub2.
- 3. Taricco M, Adone R, Pagliacci C, Telaro E. Pharmacological interventions spasticity following spinal cord injury. Cochrane Database of Systematic Reviews 2000, Issue 2. Art. No.: CD001131. DOI: 10.1002/14651858.CD001131.
- 4. Berlowitz DJ, Tamplin J. Respiratory muscle training for cervical spinal cord injury. Cochrane Database of Systematic Reviews 2013, Issue 7. Art. No.: CD008507. DOI: 10.1002/14651858.CD008507.pub2.

Cochrane Protocols

- 1. Montenegro C, Soto C, Rada G. Antiresorptive agents for the prevention of fractures after spinal cord injury. Cochrane Database of Systematic Reviews 2013, Issue 12. Art. No.: CD010892. DOI: 10.1002/14651858.CD010892.
- 2. Vasanthan LT, Nehrujee A, Solomon J, Tilak M. Electrical stimulation for people with spinal cord injury. Cochrane Database of Systematic Reviews 2019, Issue 11. Art. CD013481. 10.1002/14651858.CD013481.



cochrane.rehabilitation@gmail.com



@CochraneRehab

rehabilitation.cochrane.org



I.R.C.C.S. Istituto

Ortopedico Galeazzi