

INPLASY

Spinal Cord Stimulation in Acute Conditions: A Systematic Review

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ADMINISTRATIVE INFORMATION

Support - N/A.

Review Stage at time of this submission - Data analysis.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202470082

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 21 July 2024 and was last updated on 21 July 2024.

INTRODUCTION

Review question / Objective Does spinal cord stimulation in adults achieve pain reduction (with respect to pain scales, most notably Visual Analogue Scale) compared to no intervention in case reports, observational studies, and clinical trials?

Rationale Spinal cord stimulation is well studied as an effective and widely used treatment for chronic pain management. Given recent technological advances in the efficiency of spinal cord stimulation, we seek to understand how spinal cord stimulation could be useful for acute pain management.

Condition being studied This review seeks to evaluate the effectiveness of spinal cord stimulation on acute pain.

METHODS

Search strategy MEDLINE, PubMed, Embase.

Participant or population Adults (Over age of 18).

Intervention Spinal cord stimulation and neuromodulation.

Comparator Optimal Medical Management.

Study designs to be included Case reports, observational studies, randomized control trials.

Eligibility criteria No extensive co-morbidities.

Information sources MEDLINE, PubMed, Embase.

Main outcome(s) VAS score reduction for acute pain due to spinal cord stimulation .Decrease in

opioid usage due to spinal cord stimulation.
Decreased leg pain scores.

Quality assessment / Risk of bias analysis

Jadad Score and Cochrane Risk of Bias Assessment.

Strategy of data synthesis Minimum number of studies included is 3. Any data relating to pain scale and comorbidity will be utilized including VAS, SIS, PHQ-9, GAD-7.

Subgroup analysis Differences between case report data and clinical trial data will be expected due to potential strategies utilized.

Sensitivity analysis Utilized via Forest Plot.

Country(ies) involved USA.

Keywords Spinal cord stimulation; acute pain; neuromodulation.

Contributions of each author

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