

Emotional Outcomes in Chronic Pain Patients Following Spinal Cord Stimulation: A Systematic Review

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INTRODUCTION

- **Chronic pain** affects health-related quality of life by imposing physical and psychological limitations.
- Recent studies support **Spinal Cord Stimulation (SCS) efficacy** in reducing pain, improving physical functioning and decreasing opioid consumption^{1,2}.
- Our objective is to assess **SCS impact on emotional functioning** in patients with chronic pain syndromes.

METHODS

- The PRISMA guidelines were followed.
- Inclusion criteria: Original research reporting emotional outcomes following SCS implantation for chronic pain.
- Emotional functions were assessed by validated questionnaires: emotional component of Short-Form-36 (SF-36 MHS), SF-12 MHS, Pain Catastrophizing scale (PCS), Beck Depression Inventory (BDI), Hospital Anxiety and Depression Scale (HADS).

RESULTS

- A total of 1277 studies were screened. Eighty-three articles were included in the qualitative analysis.
- The most frequently reported measures were PCS (n=28), BDI (n=27), SF-36 MHS(n=25), and SF-12 (n=7).
- SF-36 MHS/SF-12 reached statistically significant improvement in 16 out of 32 studies. Ten studies showed a positive trend, and five reported no significant change following the SCS implantation.

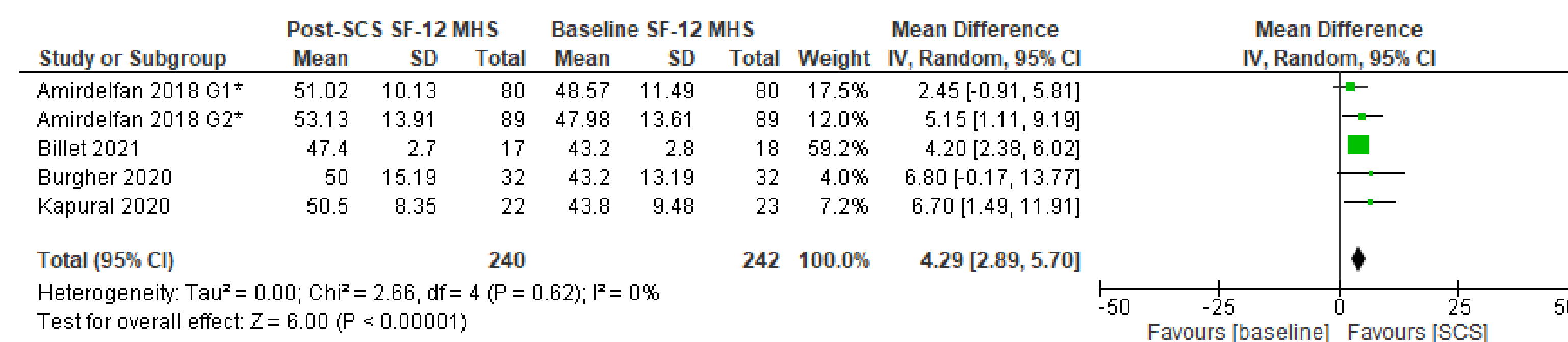


Table 1. Metaanalysis of SF-36MHS 12 months post-implantation; * RCT, Amirdelfan 2018 Group 1:HF-SCS; Amirdelfan 2018 Group 2: LF-SCS

CONCLUSIONS

- This review highlights the importance of multifactorial patient assessment when evaluating SCS efficacy.
- SCS therapy can provide **improvements in patient's mental health-related quality of life** measured by SF-36 MHS and SF-12 MHS.
- The observed increase coincides with **reduction in anxiety and pain catastrophizing**.

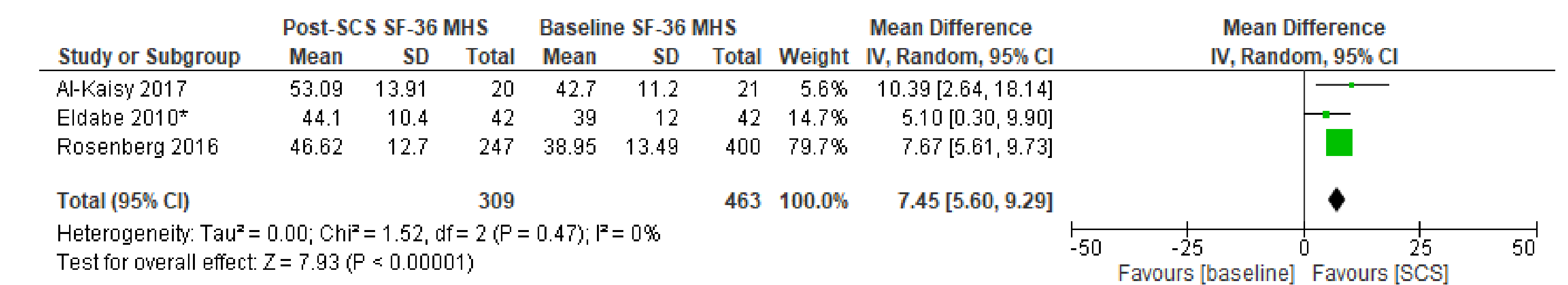


Table 2. Metaanalysis of SF-36 MHS 12 months post-implantation; * RCT

REFERENCES

1. ElSaban et al. *Regional Anesthesia & Pain Medicine* 48.6 (2023): 302-311.
2. Smith et al. *The Clinical Journal of Pain* 38.4 (2022): 285-291.