

## **ABSTRACT**

**Title:** Recent findings in the therapy of postoperative scars and their complication in the abdominal region – systematic review

**Objective:** The main objective of this diploma thesis is the evaluation of different therapeutic approaches in the therapy of postoperative scars in their proliferative phase of healing and postoperative scar pain in the abdominal region, based on the available resources corresponding to the established inclusion criteria. This thesis makes effort to evaluate which therapeutic method is most often used in the proliferative phase of healing and is most effective in acute and chronic postoperative scar pain treatment. The inclusion criteria for this review are the POSAS, VSS and NRS scales.

**Method:** This thesis is processed in the form of a systematic review. The search of sources was carried out in specialized Internet databases and electronic portals UKAŽ, Google Scholar, Scopus, Springer Link, Pubmed, EBSCOhost, PEDro, Medline, Web of Science based on keywords. The first part of the thesis contains a theoretical introduction to scar tissues. The second part is descriptive-analytical in nature and contains an analysis of the individual studies included in the literature search examining different interventions in the treatment of postoperative abdominal scars.

**Results:** A total of 8 clinical randomised controlled trials that met the entry criteria were included in the final systematic review. Based on the results, it can be concluded that the most common type of treatment in the proliferative phase of postoperative scar healing is the therapeutic use of silicones. Given the results of this diploma, it was not possible to determine which of these therapeutic modalities is most effective in the treatment of acute and chronic pain.

**Key words:** scar, active scar, abnormal scar, hypertrophic scar, keloid scar, postsurgical scar management, adhesion scar tissue, postsurgical adhesion, postsurgical scar pain, manual scar therapy, massage scar therapy, abdominal scar tissue therapy