

ERAS 2019 - Abstract Submission

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EXERCISE PRESCRIPTION FOLLOWING SPINAL SURGERY: DOES CURRENT PRACTICE REFLECT ERAS PRINCIPLES?

Matthew Low¹, Louise Burgess², Thomas W. Wainwright*²

¹The Royal Bournemouth Hospital, ²Orthopaedic Research Institute, Bournemouth University, Bournemouth, United Kingdom

Objectives: Following spine surgery, effective postoperative rehabilitation is important to help patients return to normal function and achieve their recovery goals. Despite this, physiotherapy has been reported as inconsistent, with limited evidence to support the effectiveness of one rehabilitation intervention over another. As a main focus of Enhanced Recovery after Surgery (ERAS) pathways is to accelerate post-discharge recovery and physical rehabilitation, it is of utmost importance that the postoperative physiotherapy treatment is effective. Here, we aim to critically analyse current postoperative exercise prescription for lumbar spine patients through a content analysis of patient information leaflets.

Methods: Patient information leaflets were sourced online, and then a content analysis was conducted to collect relevant data. Data were organised into percentage totals to allow the comparison of basic descriptive statistics, and a thematic analysis was conducted to compare the content of the leaflets.

Results: Thirty-two patient information leaflets on lumbar surgery were identified (fusion, n=11 decompression n=15; combined lumbar procedures, n=6). Fourteen different exercises were found and were categorised into four themes (muscle activation exercises, movement control exercises, neurodynamic exercises and range of movement exercises). There were no weight-bearing functional exercises identified. The prescription of transversus abdominus muscle activation was the most commonly prescribed postoperative exercise (47%).

Conclusion: The use of muscle activation exercises (static exercises) may have a proprioceptive function but are of questionable benefit to enhancing patient recovery due to lack of biological plausible relationship to function. All of the exercises lacked the dose to strengthen or achieve carry over into functional activities. The current literature surrounding the use of transversus abdominus exercises for patients with low back pain is contentious at best, particularly as it is conceived as an exercise to enhance stability of the spine. Despite the theoretical notion of enhancing stability it is prescribed to patients following spinal fusion where the spine has been stabilised surgically. There is a clear need to improve postoperative rehabilitation as part of future ERAS pathways in spinal surgery.

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