## **ERAS 2019 - Abstract Submission**

## ERAS19-1122

## THE INCLUSION OF PREOPERATIVE EDUCATION IN ERAS SPINAL SURGERY PATHWAYS: A SYSTEMATIC REVIEW

Louise Burgess<sup>1</sup>, Joseph Arundel<sup>1</sup>, Thomas W. Wainwright<sup>\*</sup>

<sup>1</sup>Orthopaedic Research Institute, Bournemouth University, Bournemouth, United Kingdom

**Objectives:** Enhanced Recovery after Surgery (ERAS) principles are starting to be adopted in major spinal procedures, and the high volume of surgeries, and wide variations in length of stay and complications rates suggest that improvements are both desirable and possible. Psychosocial factors related to different degrees of clinical impairment and quality of life in the preoperative period may influence outcomes, and patients have expressed a need for individualised information given in sufficient quantities and at the appropriate time to help attenuate preoperative anxiety. Preoperative education is a core component of ERAS that aims to empower patients to undertake positive health actions and support autonomous decision making. This review aims to summarise the current evidence for inclusion of a preoperative education session into ERAS spinal surgery pathways.

**Methods:** PubMed, Cochrane Library, CINAHL Complete, Medline Complete and PsychINFO were searched in July 2018 for randomised clinical trials to evaluate the effects of a preoperative education intervention on clinical and psychological outcomes from spinal surgery. Articles were included if they were preoperative education or counselling interventions, or multimodal interventions with an educational component.

**Results:** The search yielded 78 results, of which ten papers (seven studies) were relevant for inclusion. From these results, there is limited, fair quality evidence that supports the inclusion of a preoperative education session for improving clinical (pain, function and disability) and psychological outcomes (anxiety, depression and fear-avoidance beliefs) from spinal surgery. Other benefits are reported to be: improved patient knowledge, feelings of better preparation, reduced negative thinking and increased levels of physical activity after intervention. No differences in quality of life, return to work or postoperative complications were reported. No interventions were trialled as part of an ERAS pathway.

**Conclusion:** From the limited evidence, it is not possible to conclusively recommend that preoperative education should be delivered as a standalone intervention before spine surgery; however given the low risk profile and the transferable evidence from other ERAS programmes, it's inclusion to ERAS spinal pathways is warranted. Future research should clarify procedure specific recommendations for content and delivery in spine surgery.

**Disclosure of Interest**: L. Burgess: None Declared, J. Arundel: None Declared, T. Wainwright Other: Treasurer and a director of The Enhanced Recovery after Surgery Society (UK) which is a not-for-profit organisation and is affiliated to the International ERAS Society