

Answering Reviewers

Reviewer comment: I would firstly compliment the authors for their work. I went through the article with great interest and attention. I believe there are both strengths and weaknesses in this manuscript, and after balancing them I have made recommendations against publication of the manuscript, with the possibility to carry out major revision and resubmit the paper for further consideration of publication. English is very good (only minor polishing needed). Abstract is well structured. The topic is worth of investigating and relevant in its field. Most current bibliography is reported and discussed.

Authors response: The author would like to thank the reviewer for sparing the time and effort in reviewing the manuscript and positively considering the manuscript for publication. The suggested changes would indeed increase the scientific and academic value of the manuscript.

Reviewer comment: I believe the authors should improve the creativity of their work and give a different angle to the article (more scientific), highlighting future directions of research in this field and significant learning points. Authors should also revise the manuscript making sure the scientific significance is improved. Authors should describe and discuss both pertinent aspect of TKR Eras protocol and more general aspects. Goals and aims should be better clearly stated. Conclusions should be supported by adequate discussion.

Authors response: The following portion has been added to the manuscript mentioning the scientific evidence, highlighting future direction of research and significant learning points. The authors have now enumerated the 17 “pertinent aspect of TKR Eras protocol” and the general aspects. Outcome “goals and aims” have been included. This has enhanced the discussion.

Added portion:

ERAS protocols are currently based on scientific evidence of a combination of multidisciplinary protocols to improve outcomes, hasten recovery and reduce cost during the

perioperative period [34]. Although ERAS has now scientifically established itself as the standard of care, future studies focusing on the compliance to ERAS protocols would validate its utility and relationship with outcomes [35]. ERAS protocols continue to evolve as our learning in identifying therapeutic interventions targeting “modifiable risk factors” by modulating surgical stressors and ensuring perioperative homeostasis ensure improved outcomes [36].

While ERAS protocols have shown to decrease mortality, need for blood and blood component transfusion, complication rate and length of stay, studies have identified at least 17 specific elements, optimizing their usage in clinical scenarios would be guided by future studies [37]. These elements consist of preoperative components of (1) “preoperative information, education and counseling”, (2) preoperative optimization of smoking, alcohol consumption and anemia and (3) optimum preoperative fasting [37]. The intraoperative components include (4) a standardized anaesthesia protocol, (5) local anesthetic infiltration and specific nerve blocks, (6) prevention of postoperative nausea and vomiting, (7) reducing perioperative blood loss with use of tranexamic acid, (8) perioperative analgesia including use of paracetamol, (9) ensuring normothermia and (10) optimum antibiotic prophylaxis, (11) perioperative fluid management and (12) modulating surgical factors [37]. The postoperative interventions include (13) thromboprophylaxis, (14) postoperative nutrition, (15) early mobilization, (16) criteria-based discharge and (17) continuous audit and improvement [37]. Recent studies additionally show the importance of multidisciplinary approach improving nursing outcomes also [10].