Peer Review File

Article information: http://dx.doi.org/10.21037/ales-20-69.

Reviewer 1

Comments to the authors:

This is a comprehensive recording of IDEAL framework of TaTME training adopted in UK.

During developing a new and challenging surgical technique such as TaTME, IDEAL framework is a good example to adopt in terms of safety and quality. I believe this recording article will be helpful for other areas to adopt TaTME and future new techniques.

I only have one comment that it has too many tables and figures included. Could it be more concise or put some in Appendix?

Comment 1: I only have one comment that it has too many tables and figures included. Could it be more concise or put some in Appendix?

Reply 1: Many thanks for the reviewer's comments. We have reduced the number of the tables into 6 and the figures into two and provided the remaining tables and figures as appendices 1-3.

Reviewer 2

Comments to the authors:

Overview

Comment 2: The authors have presented an interesting article outlining the process implementation of a novel surgical technique using a structured framework (IDEAL). A structure such as that presented seems very appropriate given the importance of quality assessment and control in the early phase of procedure implementation. Methods to shorten the learning curve for individual surgeons are also of great importance.

Reply 2: Many thanks for the reviewer's comments

More specifically

Comment 3: Language: very well written with no significant issues. "and" should replace "ad" on line 100; "patients" should replace "patient" on line 249.

Reply 3: We would like to thank the reviewer for highlighting this error which has now been corrected in line 151 and line 277. Please be aware that the numbers were changed with the formatting.

Methods:

Comment 4: The methods appear sound, and the description of each step of the IDEAL framework ads to . A brief description of how case numbers and thresholds for training and proctorship eligibility would be interesting to undertand the process. This section is perhaps much longer than is required and could be condensed, with references to previous publications on the methodology

Reply 4: Many thanks for raising for point which has been addressed as the methodology has been shortened in the revised draft.

Results:

Comment 5: The number of cases is low (appropriately acknowledged by the authors). Follow up (whilst termed "long-term") is insufficient for firm conclusion to be drawn, which fits with pilot nature of the paper.

Reply 5: We appreciate the reviewer's comments about the number of proctored cases as well as the length of follow up – as it is stated, these limitations have been acknowledged in the discussion.

Comment 6: While a degree of selection bias would be expected although the patient and disease characteristics of the included cases seems appropriately generalizable. However, comment also needs to be made regarding the appropriateness of including APR's in the initial learning phase - especially as the expert recommendations (from similar authors I suspect) suggest extended resections such as APR should not be done in the early phases.

Reply 6: We would like thank the reviewer for bringing up this point about including APR in the initial learning phase. We agree that APR should be considered at a later stage of the learning curve but the three APR cases which were carried out at the initial phase of this project and the steering group made sure that they should be avoided and strict selection criteria then followed, resulting in 83.3% of restorative surgery.

Comment 7: Could the authors elaborate on the nature of the bilateral compartment syndrome complications, and whether this was a direct result of surgery or due to something else.

Reply 7: Thanks for highlighting this point. The bilateral compartment syndrome was observed in one case (first case) due to prolonged surgery and mal-positioning of the

patient which was corrected on the following four cases with no further incidence. This has been added to the text in page 19 lines 403-405

Comment 8: There are a large number of tables and figures, which could be rationalised for conciseness.
Reply 8: Thanks for highlighting this point which has already been addressed.

Comment 9: Overall, I commend the authors on this manuscript, which is of great relevance. It is very well written.
Reply 9: Thank you.

Reviewer 3

Comments to the authors:

Comment 10: In the present paper, authors describe how a five stage outline (IDEAL framework) was applied to describe the development, delivery and assessment of the TaTME training initiative in the UK. The paper is well written despite the main limitation stays in the few cases proctored (24 cases in 5 centers) Moreover the same results of this initial experience has been extensively reported in a paper published on Colorectal Disease (I suppose by the same Group).
Reply 10: We appreciate the reviewer's comment regarding the number of cases, which has been addressed above and we have added the following paragraph to the discussion.
"Additionally, given the limited available expert trainers for this relatively novel procedure and the financial constraints, it was only possible to provide training to a limited number of centres."