Answers to reviewers

Reviewer 1

1. The authors are kindly suggested to comment on the sample size by adding the pre-specified power of the study.

The sample size was calculated for two independent groups TRX and Non-TRX by using G*power software. The estimated sample size obtained from the power analysis was at least 50 respondents for group 1 and 50 respondents for group 2 respectively.

2. The authors are kindly suggested to explicitly report the extent of the missing values and clarify if they are MCAR, MAR, or MNAR in order to support their decision to simply exclude patients and not e.g. perform data imputation.

We did not exclude any patients surgically treated with isolated spine trauma. All patients who met the eligibility criteria were included. Exact data for intraoperative blood loss (IBL) was missing for some patients, hence IBL values were estimated in a range.

3. The authors are kindly proposed to handle intraoperative blood loss as a continuous variable and not as an ordinal one in an effort to achieve the best statistical power possible.

This is rectified in the further detailed data analysis.

4. Did the authors notice any bias attributable to the patinets' orogin? The authors are welcome to perform a comparison between the two centers implicated in the study.

In our study, we did not find any bias in the patients' group in terms of gender or origin. Due to the even smaller samples across the 2 units, we did not perform the comparison.

5. The authors are kindly suggested to elaborate a Cox-regression model evaluating hospitalization duration (admitance to discharge) using TXA and blood loss as independent variables.

This is rectified in the table 4.

6. All statistical tests used are parametric. The authors are kindly requested to justify their choice by adding information regarding at least normality and homogeneity of variance

This is rectified with table 4 and in the results section.

7. The authors are kindly asked to report references in the proper format.

This is rectified in the reference section using reference auto-analyser.

Reviewer 2

1. It is not clear for readers how many patients were excluded in this study.

We did not exclude any patients surgically treated with isolated spine trauma. All patients who met the eligibility criteria were included. Exact data for intraoperative blood loss (IBL) was missing for some patients, hence IBL values were estimated in a range.

2. Potential selection bias should not be ignored. Why both groups could be matched in terms of age, gender, ASA grade, and mechanism of injury in this study?

We found no significant difference in the mentioned variables in the 2 two groups. There could be a selection bias but our study did not show any and to rule out selection bias completely a randomized controlled trial would be more appropriate.

3. Detailed statistical results should be provided (rather than 74% vs. 56%).

This is rectified with table 4 and in the results section.

4. Regarding the blood loss and the incidence of blood transfusion, the results may differ among surgeons.

This is explained in the limitation section as one of the confounding factors and hence can effect the results of the study.

5. Dose-dependent effects of Tranexamic Acid (TXA) were lacking in this study.

Further studies are needed in future to look at the dose-dependent effects of TXA. Our study is looking at the clinical practice of approximately 15 different surgeons across two distinct centres managing isolated spine trauma.

6. Apart from Tranexamic Acid (TXA), some may argue that other treatments (for example, aspirin) may also have potential effects on final results. Did you calculate the sample size?

In our study, 4 patients were on routine Aspirin and had no potential effect on the outcome. The sample size is explained in the results section.

7. How about long-term safe effects?

We only looked at the inpatient stay of the patients. Further studies are required to look at the long-term follow-up of these patients.