

## PEER REVIEW HISTORY

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### ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	Neurosurgical enhanced recovery after surgery (ERAS) program for elective craniotomies: are patients satisfied with their experiences? A quantitative and qualitative analysis
<b>AUTHORS</b>	Liu, Bolin; Liu, Shujuan; Wang, Yuan; Zhao, Binfang; Zhao, Tianzhi; Zhao, Lanfu; Lv, Wenhai; Zhang, Yufu; Zheng, Tao; Xue, Yafei; Chen, Lei; Chen, Long; Wu, Yingxi; gao, guodong; Qu, Yan; He, Shiming

### VERSION 1 – REVIEW

<b>REVIEWER</b>	Federico Bilotta Dr, PhD, Policlinico Umberto I, University of Rome La Sapienza-Italy
<b>REVIEW RETURNED</b>	23-Jan-2019

<b>GENERAL COMMENTS</b>	<p>BMJ-2018-028706</p> <p>In this RCT, the Authors evaluated patients satisfaction with a dedicated questionnaire (Each question was answered using a 1-5 point numerical scale, with higher points indicating higher levels of patient satisfaction: 1 = completely dissatisfied; 2 = moderately dissatisfied, 3= neutral, 4= moderately satisfied, 5= completely satisfied) and associated predictors of patient satisfaction at discharge as well as patient experience at 30-day follow-up in a neurosurgical enhanced recovery after surgery (ERAS) program. The Authors enrolled, in a single-centre, 140 neurosurgical patients (between October 2016 and July 2017) admitted for elective craniotomy and randomized to 2 groups: 70 patients received care according to a dedicated neurosurgical ERAS protocol (ERAS group), and 70 patients received conventional perioperative care (control group).</p> <p>Mean patient satisfaction was significantly higher in the ERAS group compared with control group at discharge (ZZ vs ww; p ...)</p> <p>The most important predictors of patient satisfaction at discharge included age, postoperative nausea and vomiting (PONV) pain visual analog scale (VAS), absorbable skin suture, and postoperative length of stay (LOS).</p> <p>Authors concluded that patients in the ERAS group showed higher satisfaction compare with the controls. Factors including age, PONV VAS, absorbable skin suture, and postoperative LOS were independent predictors for overall patient satisfaction.</p> <p>Comments</p> <p>This RCT is interesting and disclose relevant implications of satisfaction of neurosurgical patients.</p> <p>A major limitation is that there was not a dedicated sample size calculation. I would suggest to run a sample size calculation based on a specific end point.</p>
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	Page 7 line 17,18: report the number of citations at the end of sentence. One digit after comma is enough. (page 7 line 35-37: for the beta-coefficient, OR, CI). Page 11 line 29: please report numbers in numbers and not in letters.
<b>REVIEWER</b>	Jose Alberto Landeiro M.D, PhD. Department of Neurosurgery. Hospital Universitario Antonio Pedro. Health Science Center, Medicine School. Universidade Federal Fluminense, Rio de Janeiro Brasil
<b>REVIEW RETURNED</b>	26-Jan-2019
<b>GENERAL COMMENTS</b>	I would to congratulate the authors. Cost reduction and patient satisfaction are a key point nowadays. I would suggest driving this research including costs.

### VERSION 1 – AUTHOR RESPONSE

#### Reviewer #1:

1. A major limitation is that there was not a dedicated sample size calculation. I would suggest to run a sample size calculation based on a specific end point.

As also pointed out by the editor in comment #5, the measure of patient satisfaction in the current paper was a secondary endpoint of the main trial study (Wang Y, Liu B, Zhao T, et al. Safety and efficacy of a novel neurosurgical enhanced recovery after surgery protocol for elective craniotomy: a prospective randomized controlled trial. J Neurosurg 2018;1-12. doi: 10.3171/2018.1.JNS171552)).

The sample size was powered for the primary endpoint (i.e. postoperative LOS) of the main trial study. We agreed with the reviewer that the lack of a dedicated sample size calculation for endpoints in this paper is a major limitation and we have run a post-hoc power analysis to address this issue. We have also included this point in the Discussion Section: “Another limitation is the lack of dedicated sample size calculation for outcomes measured in this study since patient satisfaction was a secondary outcome of the main trial.4 Nevertheless, the risk of an underpowered sample size was to some extent counter-balanced by a post-hoc power analysis for patient satisfaction, which yielded a post-hoc power of 100%.”

2. Page 7 line 17,18: report the number of citations at the end of sentence.

We followed the reviewer’s suggestion and moved the citation number to the end of sentence.

3. One digit after comma is enough. (page 7 line 35-37: for the beta-coefficient, OR, CI).

We followed the reviewer’s suggestion and reported these statistics with one digit after comma.

4. Page 11 line 29: please report numbers in numbers and not in letters.

We followed the reviewer’s suggestion and reported numbers in numbers.

#### Reviewer #2:

I would to congratulate the authors. Cost reduction and patient satisfaction are a key point nowadays. I would suggest driving this research including costs.

We appreciated the reviewer’s positive comments and we agreed with the reviewer that cost reduction should be valued as a key point in quality improvement of medical care. In fact our neurosurgical ERAS program was associated with a significant reduction in overall cost, which was reported in our previous paper of the main trial (Wang Y, Liu B, Zhao T, et al. Safety and efficacy of a

novel neurosurgical enhanced recovery after surgery protocol for elective craniotomy: a prospective randomized controlled trial. J Neurosurg 2018;1-12. doi: 10.3171/2018.1.JNS171552)). We have added a paragraph in the end of Discussion Section: “In addition to patient satisfaction, medical cost reduction should be highly valued as well given the increasing cost burden posed on both the patients and public finance. To this end, ERAS programs may play an important role in quality improvement with cost-effective care.”

#### VERSION 2 – REVIEW

<b>REVIEWER</b>	Steve Sizmur Picker Institute Europe UK
<b>REVIEW RETURNED</b>	09-Oct-2019
<b>GENERAL COMMENTS</b>	#15 considerable editing would be required to bring the text up to an appropriate standard of English #13 I have not commented on the supplementary reports as these are appropriate for qualitative research