anesthesia to ablate the rise in pulmonary vascular resistance associated with surgical stimuli is one of the primary goals in anesthesia management of these patients, what was the reason to use sevoflurane as a sole anesthetic agent in a cardiac patient with persistent pulmonary hypertension, if early postoperative extubation was not planned?

Conflicts of interest

The authors declare no conflicts of interest.

References


Mefkur Bakan
Bezmialem Vakif University, Faculty of Medicine, Department of Anesthesiology and Reanimation, Istanbul, Turkey
E-mail: mefkur@yahoo.com
http://dx.doi.org/10.1016/j.bjane.2017.04.003
0104-0014/
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Effects of lidocaine and magnesium sulfate in attenuating hemodynamic response to orotracheal intubation: a single-center, prospective, double blind, randomized study

Os efeitos da lidocaína e do sulfato de magnésio na atenuação da resposta hemodinâmica à intubação orortraqueal: estudo unicêntrico, prospectivo, duplamente encoberto e aleatorizado

Dear Editor,

It was with great pleasure that I read the article "Effects of lidocaine and magnesium sulfate in attenuating hemodynamic response to orotracheal intubation: a single-center, prospective, double blind, randomized study". Concerned to clarify some points related to the statistical analysis and conclusion; here are some considerations to the authors:

1. The authors report a discrete statistical difference and this does not allow the article’s reader to come to conclusions: "There was a statistically significant increase in SBP (p = 0.018) and DBP (p = 0.0467) values measured post-TI (Fig. 2), but of little clinical importance". The values should have been demonstrated in text because, as shown in Fig. 2, it is not possible to capture its magnitude, so that the lack of clinical importance does not represent absence of biological relevance;
2. The data were partially or totally analyzed over time, and the patients were also submitted to anesthetics in addition to the medications tested, which may be in addition or not. It is known that magnesium sulfate has a prolonged clinical effect after venous use, whereas lidocaine has a short protective effect compared to magnesium. Thus, there are two factors that must be considered in this statistical analysis: time and treatment. The best statistical test to perform in this situation is two-way ANOVA. The results analyzed as they are in the text may be erroneously positive and the possibility of a type I error in this research is clearly perceived;
3. If the authors consider the use of the Student’s t test as correct, or more appropriately in some cases the Mann–Whitney U test, according to the text, they should have corrected the p value with the procedure for multiple correction of hypothesis tests, instead of considering only 5% as the level of significance in all analyzes. The possibility of having a positive result in the statistical analysis occurring at random is 5%. The p-value correction would have reduced the probability of a random occurrence of the statistical result. Thus, the possibility of type I error in this research is clear;
4. The objective described by the authors was "to compare the effects of intravenous administration of magnesium sulfate versus lidocaine on this reflex hemodynamics after laryngoscopy and orotracheal intubation". The authors’ conclusion was "magnesium sulfate and lidocaine have good efficacy and safety in hemodynamic control during laryngoscopy and intubation", which is not in line with the proposed objective. It is necessary that the authors relate what were the efficacy variables and also the safety variables so that the conclusion is better understood. Noteworthy, the term efficacy should generally be used in research whose execution conditions are ideal, as with laboratory studies. This term should
also be reviewed by the authors, effectiveness is the term suggested;
5. Finally, I leave as a recommendation the observation to
the authors that there are larger doses, equally safe and
equally effective, that could have been tested in this
clinical trial and increased the degree of information
related to the topic.2

I congratulate the authors for the brilliant initiative,
while celebrating at the same time the possibility of cre-
at ing this line of research in anesthesia in Brazil. Thank you
for the opportunity to contribute to this topic.

Conflicts of interest
The author declares no conflicts of interest.

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prospectivo, duplamente encoberto e aleatorizado. Rev Bras
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Fabiano Timbó Barbosa
Centro Universitário Tiradentes, Ciências da Saúde,
Maceió, AL, Brazil
E-mail: fabianotimbo@yahoo.com.br

http://dx.doi.org/10.1016/j.bjane.2017.04.009
0104-0014/
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Reply to the letter to the Editor

Resposta à carta ao Editor

Dear Editor,

We thank Barbosa’s1 letter in which he appreciates our work
and praises the study “Effects of lidocaine and magnesium
sulfate in attenuating hemodynamic response to orotracheal
intubation: a single-center, prospective, double-blind, ran-
domized study” carried out in our service.2 For us, author
and author’s guest to write this replay, it is only fair that we
respond with attention to all questions, within our limita-
tions:

(1) Question: The authors refer to a discrete statistical dif-
ference, which does not allow the reader to draw his
own conclusions: “Group M had a statistically significant
increase in SBP (p = 0.018) and DBP (p = 0.0467) post-OTI
(Fig. 2), but of little clinical importance.” The values
should be demonstrated in text because, as it is in Figure
2, it is not possible to capture the magnitude of them, so
that the lack of clinical importance does not represent
absence of biological relevance.

Regarding Item 1, it was really flawed, but not inten-
tional, on our part to omit these data. The missing data
are on Table 1.

(2) Question: Data were, in part or in whole, analyzed over
time and patients also received anesthetics, in addition
to the medications tested, which may be additional or
not. It is known that magnesium sulfate has a prolonged
clinical effect after venous use, whereas lidocaine has a

Table 1 Comparison of the mean ± standard deviation of
blood pressure in mmHg at the different times of the study.

<table>
<thead>
<tr>
<th>SBP</th>
<th>Group L</th>
<th>Group M</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admission</td>
<td>139 ± 19.1</td>
<td>137.7 ± 17.7</td>
<td>0.8072</td>
</tr>
<tr>
<td>Post-MDZ</td>
<td>119.9 ± 15.5</td>
<td>123.5 ± 14.3</td>
<td>0.4055</td>
</tr>
<tr>
<td>CIP end</td>
<td>122.9 ± 17.7</td>
<td>120.9 ± 16.6</td>
<td>0.6657</td>
</tr>
<tr>
<td>Post-IND</td>
<td>90.9 ± 16.1</td>
<td>96.5 ± 16.3</td>
<td>0.1912</td>
</tr>
<tr>
<td>Post-OTI</td>
<td>119.5 ± 24.6</td>
<td>134 ± 24.6</td>
<td>0.0180*</td>
</tr>
<tr>
<td>3' Post-OTI</td>
<td>108.1 ± 22.3</td>
<td>116.2 ± 16.2</td>
<td>0.1482</td>
</tr>
<tr>
<td>6' Post-OTI</td>
<td>96.8 ± 17.3</td>
<td>105.9 ± 16.2</td>
<td>0.0520</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DBP</th>
<th>Group L</th>
<th>Group M</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admission</td>
<td>85.7 ± 12.6</td>
<td>84.6 ± 11.5</td>
<td>0.7680</td>
</tr>
<tr>
<td>Post-MDZ</td>
<td>75.4 ± 10.7</td>
<td>77.7 ± 10.2</td>
<td>0.4473</td>
</tr>
<tr>
<td>CIP end</td>
<td>79.6 ± 11.8</td>
<td>75.2 ± 15.1</td>
<td>0.2646</td>
</tr>
<tr>
<td>Post-IND</td>
<td>55.1 ± 11.3</td>
<td>57.3 ± 11.3</td>
<td>0.4956</td>
</tr>
<tr>
<td>Post-OTI</td>
<td>77 ± 19.9</td>
<td>87.4 ± 15.2</td>
<td>0.0467*</td>
</tr>
<tr>
<td>3' Post-OTI</td>
<td>68.1 ± 18.3</td>
<td>70.4 ± 12.8</td>
<td>0.6189</td>
</tr>
<tr>
<td>6' Post-OTI</td>
<td>59.6 ± 14.9</td>
<td>62.1 ± 11.6</td>
<td>0.5192</td>
</tr>
</tbody>
</table>

SBP, systolic blood pressure; MDZ, midazolam; CIP, continuous
infusion pump; IND, induction (of anesthesia); OTI, orotracheal
intubation; DBP, diastolic blood pressure.

* Statistically significant.

DOI of refers to article:
http://dx.doi.org/10.1016/j.bjane.2015.08.004

☆ Author’s reply to the Letter to the Editor: Effects of lidocaine
and magnesium sulfate in attenuating hemodynamic response to
orotracheal intubation: a single-center, prospective, double-blind,
randomized study.