



# REVISTA BRASILEIRA DE ANESTESIOLOGIA

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## LETTERS TO THE EDITOR

### Evaluation of the efficacy of lidocaine and magnesium sulphate in reducing the hemodynamic effects caused after intubation/laryngoscopy



### Avaliação da eficácia de lidocaína e sulfato de magnésio para reduzir os efeitos hemodinâmicos desencadeados pela laringoscopia/intubação

Dear Editor,

Firstly, we would like to thank the Brazilian Journal of Anesthesiology for publishing this study comparing the effects of lidocaine and magnesium sulfate and the researchers for their efforts in conducting this study.

The subject selection criteria plus the nature of prospective randomised double blind studies omit any question of bias.

However, we have identified several limitations of the method. Firstly, a single centre study with a small number of subjects is not representative of a larger population. Additionally, according to the power analysis there should have been at least 25 patients in Group L to make accurate conclusions about lidocaine – although it is arguable that a difference of one is a trivial.

It would have been helpful if the researchers had explained their choice of administration methods of the drugs further. It can be suggested that a lower total dose of lidocaine could have reached peak effects quicker with a bolus.<sup>1</sup> Moreover, we wonder whether it was the intention of the researchers to give study drug infusions which would still be lowering blood pressure six minutes post OTI.<sup>2</sup> We are curious to know how long it took after study drug infusion for the subjects' blood pressure to return to normal.

It is known that ethnicity is one of the main risk factors for hypertension. It has been found that black people have a higher systolic and diastolic pressure than those with European origin.<sup>3</sup> Therefore, a greater blood pressure in Group M may be due to more participants being of African origin. The authors have not supplied supplementary data indicating the ethnicities of participants which would be useful in assessing

the contribution of ethnicity to the effect the drug has on blood pressure.<sup>2</sup>

The authors state that their study “was performed with healthy patients” however table 1 in the paper by Mendonça et al. suggests that a proportion of participants took diuretics, angiotensin receptor blockers and ACE inhibitors.<sup>2</sup> As the authors provide no supplementary data it is unclear if 15 participants were taking anti-hypertensive drugs or if a smaller number took multiple drugs. Furthermore, the paper does not explain why these participants were on anti-hypertensive drugs. They may have been administered medication to ensure the patients had a similar blood pressure pre-surgery. However, as hypertension is associated with left ventricular hypertrophy amongst consequences, it questions whether the study was “performed with healthy patients”.<sup>3</sup> The publication of supplementary material detailing the health of the patients would facilitate accurate interpretation of the results.<sup>2</sup>

The title of the study does not clarify that its purpose is to compare the two drugs' efficacy. A title explicitly stating the comparative nature of the study would be more appropriate.

The several drawbacks of this study include the lack of stratification of the results based on ethnicity and the health of participants and comprehensive explanations on their choice of methods. However, the unbiased nature of this study gives credit to its results.

### Conflicts of interest

The authors declare no conflicts of interest.

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## Non-invasive mechanical ventilation after the successful weaning: a comparison with the venturi mask



## Ventilação mecânica não invasiva após desmame bem-sucedido: uma comparação com a máscara venturi

Dear Editor,

Thank you for the comments on our study that shows the beneficial effects of NIV after weaning.

NIMV is not a new form of treatment for respiratory failure in selected group of patients. In many ICUs it has been used successfully when the patient obviously needs some respiratory support in between oxygen flow only and invasive ventilatory therapy. Its place both for pulmonary and for some cardiologic problems has also been well described.

Profilactic routine use of NIMV after extubation is an exciting new field. The main idea is to prevent the development of extubation failure that is not normally expected.

The study has performed in a mix ICU that admits both surgical and medical patients. We deliberately have chosen a mix group of patients and also did not carefully select the ones who might need NIV more than the other. A standardized selection criteria that showed neurologic, respiratory and hemodynamic stabilization after an hours trial period were accepted sufficient to enter the study. This is deliberately done so, because the main idea of this new area of NIV is to use this form of respiratory support for more patients, for more occasions not to miss any unrecognized patients harboring high risk of extubation failure

In our study the mean age in both groups are over 67 and 71. Most of the medical and many surgical patients needed ICU admission and MV postoperatively had significant co-morbidities.

This actually may be both the reason of the higher success rate of NIV group and higher rate of extubation failure in VM group of patients, compared to the rates in literature. Yet,

there had to be a less detailed selection criterion to test a more systematic use of NIV in post-extubation field.

The different results in similar studies may actually be representing different and possibly less severe patient populations.<sup>1,2</sup> Our results reflect our units patient population. They are usually at higher age with systemic problems and they usually have high risk operations. In this respect, the characteristics of our study population might have been better described. And in such patient groups, if not all, we believe that NIV may well be beneficial to prevent post extubation respiratory failure development.

### Conflicts of interest

The authors declare no conflicts of interest.

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