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LETTERS TO THE EDITOR

Effect of head rotation on intraocular pressure in prone position: randomized study[☆]



Efeito da rotação da cabeça na pressão intraocular em decúbito ventral: estudo randomizado

Dear Editor,

The article entitled “Effect of head rotation on intraocular pressure in prone position: randomized study” recently published in the Brazilian Journal of Anesthesiology calls the reader’s attention to the importance of the good practice of anesthesia in order to prevent serious complication to patients undergoing surgery in prone position, which is the loss of vision.¹

The important items that demonstrate quality in randomized clinical trials are randomization, blindness, losses, and exclusions.² These items and the statistical analysis performed in the article deserve some comments.

Randomization allows the equal distribution of both known and unknown characteristics between study groups.² The randomization method was not mentioned by the authors who cited only the creation of a list, so that patient assignment to groups may have been a selection bias. Inadequate reporting hinders the validity of results.

Blindness is a technique used to prevent the interference of the investigators’ subjectivities during the research.² The blind nature of the study was not mentioned by the authors. It was just reported that the ophthalmologist who

verified the data in the preoperative period was the same for all patients. The primary end-point for the analysis was the postoperative period, as the main cause of loss of vision is intraoperative nerve ischemia.³ The knowledge of patient assignment groups by the person responsible for postoperative data collection may have influenced the results.

Losses and exclusions were not commented by the authors, but it may be assumed that they did not occur. The study seems to have had no follow-up time, and some patients may have presented symptoms of research interest and have not been properly analyzed.

The description of sample size calculation was not made in detail and does not allow to be reproduced to access the statistical accuracy of the data analysis. The frequency of vision loss reported by the authors is 0.05% and it seems to have been used for the calculation. The increased intraocular pressure magnitude, which is reported in the objective section, should be used to estimate the sample size. The inadequate description of sample size calculation makes it possible to have a probability of a type-I error occurrence in this study.

Statistical tests were not described in detail, so that several tests have indication for paired samples and the situation presented by the authors. The results may be more reliable when the tests used are appropriate.

The authors emphasized the possible beneficial effects of their findings for patients with glaucoma, but this inference could not have been made, as this group of patients was part of the exclusion criteria of this study.

The study highlights the need for greater care in the execution of anesthesia in patients who remain in the prone position, regarding intraocular pressure and also of other studies where samples receive better randomization method description and adequate statistical power.

Conflicts of interest

The authors declare no conflicts of interest.

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[☆] Study performed at Universidade Federal de Alagoas, Maceió, AL, Brazil.

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Fabiano Timbó Barbosa^{a,*},
Tatiana Rosa Bezerra Wanderley Barbosa^a,
Rafael Martins da Cunha^b

^a *Centro Universitário Uniseb Interativo, Maceió, AL, Brazil*

^b *Hospital Unimed, Maceió, Maceió, AL, Brazil*

* Corresponding author.

E-mail: fabianotimbo@yahoo.com.br (F.T. Barbosa).

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A question about ropivacaine for unilateral spinal anesthesia: hypobaric solution



Uma questão sobre ropivacaína para raquianestesia unilateral: solução hipobárica

Dear Editor,

I am a doctor from department of anesthesiology, Shanghai Sixth People's hospital, Shanghai Jiao Tong University, Shanghai, China. I have many interests in ropivacaine for unilateral spinal anesthesia: hypobaric solution. So I have read your literature titled "Ropivacaine for unilateral spinal anesthesia; hyperbaric or hypobaric?"¹ In this article, it was mentioned that "group Hypo ($n = 30$) received 11.25 mg of ropivacaine (7.5 mg mL^{-1}) + 2 mL of distilled water (density at room temperature was 0.997)". Because ropivacaine (7.5 mg mL^{-1}) is isobaric solution and density of distilled water is 1, why the density of mixed solution was 0.997? I made these mixed solution to survey the density, and the density was 1.006. Please tell me the answer, and tell me

your way to make the mixed solution and survey the density. Thank you very much.

Conflicts of interest

The author declares no conflicts of interest.

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Da-Qiang Zhao

Department of Anesthesiology, Shanghai Jiaotong University Affiliated Sixth People's Hospital, Shanghai, China

E-mail: hellinspy@sohu.com (D. Zhao).

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