

## Comment on “Protective effect of dexmedetomidine on perioperative myocardial injury in patients with Stanford type-A aortic dissection”

Chuanding Li<sup>1</sup> , Shigao Wang<sup>2\*</sup> , Man Wang<sup>3</sup> 

Dear Editor,

We have perused with interest the article entitled “Protective effect of dexmedetomidine on perioperative myocardial injury in patients with Stanford type-A aortic dissection” in which Wang et al.<sup>1</sup> found that dexmedetomidine treatment may alleviate perioperative myocardial injury in patients with Stanford type-A aortic dissection by resisting inflammatory response and oxidative stress. However, there are still more issues in our opinion.

First, 86 patients were randomly divided into dexmedetomidine (Dex) group and control group, with 43 cases in each group. However, random grouping method should be provided in this study. There was no significant difference in gender, age, BMI, smoking history, hypertension history, diabetes mellitus history, ASA grade, anesthesia duration, cardiopulmonary bypass duration, or surgery duration between Dex and control groups. Basic information on the demographics of Dex and control groups should also be given, especially for statistical values and p-values.

Second, it is not clear whether the article is based on a retrospective study or a prospective study. If this article is based on a prospective study, there might be some patients who refused to cooperate with the researcher. Also, this study involved a small sample. Hence, sample size power estimation is needed in “Methods” section.

In “Results” section, the study found that the heart rate and mean arterial pressure in the Dex group were significantly lower than those in the control group at t2 and t3. We were surprised to find that the standard deviation of heart rate and mean arterial pressure is about 50% of the mean heart rate and mean arterial pressure. Therefore, these results should be considered with caution and need further confirmation.

### AUTHORS' CONTRIBUTIONS

**MW:** Data curation, Formal Analysis, Writing – original draft. **SW:** Conceptualization, Data curation. **CL:** Conceptualization, Writing – review & editing.

### REFERENCE

1. Wang D, Lin Q, Du M, Zheng G, Xu W, Zhang H, et al. Protective effect of dexmedetomidine on perioperative myocardial injury in patients with Stanford type-A aortic dissection. *Rev Assoc Med Bras (1992)*. 2020;66(12):1638-44. <https://doi.org/10.1590/1806-9282.66.12.1638>

<sup>1</sup>Jingmen Recovery Hospital, Department of Anesthesiology – Jingmen, China.

<sup>2</sup>Jingmen Traditional Chinese Medicine Hospital, Department of Anesthesiology – Jingmen, China.

<sup>3</sup>Yingshan People's Hospital, Department of Anesthesiology – Huanggang, China.

\*Corresponding author: Shigaowang886@163.com

Conflicts of interest: the authors declare there is no conflicts of interest. Funding: none.

Received on October 28, 2021. Accepted on November 18, 2021.

