LETTER TO EDITOR



Response to "Myocardial dysfunction in SARS-CoV-2 infection in infants under 1 year of age"

Dan Sun^{1,2} · Zhi-Sheng Liu¹

Received: 27 July 2020 / Accepted: 28 July 2020 / Published online: 11 August 2020 © Children's Hospital, Zhejiang University School of Medicine 2020

First of all, we want to thank the author for the approval of our article, focusing on SARS-CoV-2 infection in infants. Our article was aimed to describe the characteristics of infants under 1 year of age (excluding newborns) with COVID-19. Clinical features, chest imaging findings, laboratory tests results, treatments and clinical outcomes were analyzed. Our replies to the questions mentioned in author's letter are as follows.

Although Li et al. [1] reported that the prevalence of malnutrition in elderly patients with COVID-19 was high, no signs of malnutrition (wasting or stunting) were noticed in our infant cohort.

Creatine kinase-MB has been used to assess myocardial function in our clinical practice, and all infants were tested for creatine kinase-MB during hospitalization. Troponin T was done in some infants, and only one patient received echocardiography. 19.4% infants suffered myocardial damage, and an atrial septal defect was present in one case in our cohort. We have not routinely ruled out the congenital heart defects in the infants with SARS-CoV-2 infection. The infant with atrial septal defect was not included in the group of infants with myocardial damage.

Chest CT scan showed bilateral pneumonia in 61.11% of the patients, and unilateral pneumonia in 36.11%. One infant was asymptomatic of infection. In the choice of treatment, 41.67% received antibiotics treatment and the rest received only antiviral and traditional Chinese medication. The proportion of patients with elevated procalcitonin was higher than C-reactive protein (CRP) in the infants with SARS-CoV-2 infection, but the amplitudes of procalcitonin were not obvious in most infants. We cannot judge whether procalcitonin is a better indicator of inflammation than CRP in infants with SARS-CoV-2 infection.

Author contributions SD contributed to data collection, participated in the drafting of the manuscript, and LZS revised the manuscript. Both authors approved the final version of the manuscript.

Funding None.

Compliance with ethical standards

Ethical approval Not applicable.

Conflict of interest The authors declare that they have no conflicts of interest.

Reference

 Li T, Zhang Y, Gong C, Wang J, Liu B, Shi L, et al. Prevalence of malnutrition and analysis of related factors in elderly patients with COVID-19 in Wuhan, China. Eur J Clin Nutr. 2020;74:871–5.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Zhi-Sheng Liu liuzsc@126.com

- ¹ Department of Neurology, Tongji Medical College, Wuhan Children's Hospital, Huazhong University of Science and Technology, Wuhan, China
- ² Institute of Maternal and Child Health, Tongji Medical College, Wuhan Children's Hospital, Huazhong University and Technology, Wuhan, China