

The Importance of Myocardial Protection in Valve Surgery

Serdar Badem

Bursa City Hospital, Department of Cardiovascular Surgery, Bursa, Turkey

***Corresponding author**

Serdar Badem, Bursa City Hospital, Department of Cardiovascular Surgery, Bursa, Turkey.

Received: December 19, 2024; **Accepted:** December 26, 2024; **Published:** December 27, 2024

Dear Editor,

We read the article by Mishra et al, titled “Successful Anaesthetic Management of Triple Valve Surgery (Double Valve Replacement and Tricuspid Valve Ring Repair)- Challenges and Troubleshooting” with great interest [1]. First of all, we congratulate the authors for their valuable contribution to the literature. We would like to point out some problems regarding the content of the article and ask some questions to the authors.

Cardioplegic solutions are an essential part of cardiac surgery to achieve diastolic cardiac arrest during surgery and make surgery safer. Cardioplegic solutions can be blood or crystalloid based. There is current debate in cardiac surgery regarding which cardioplegic solutions provide the highest degree of myocardial protection during cardiac arrest. It is known that cardioplegic solutions are closely related to myocardial protection, perioperative mortality and morbidity, and distant survival during prolonged aortic cross-clamp time [2-4]. In current cardiovascular surgery, solutions such as blood cardioplegia, St. Thomas 2 solution, Bretschneider solution, del Nido cardioplegia are used in different clinics to prevent myocardial ischemia [5]. In our clinic, we use del Nido cardioplegia in valve surgery that we estimate will take a long time, and we have seen that in cases where we have extended the diastolic arrest time to 120 minutes, we have minimized myocardial ischemia in our postoperative results. The authors preferred which cardioplegic agents in this surgical experience.

Acknowledgements

None

Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

None

References

1. Mishra R, Dhole S (2024) Successful Anaesthetic Management of Triple Valve Surgery (Double Valve Replacement and Tricuspid Valve Ring Repair)- Challenges and Troubleshooting. *J Sur Anesth Res* 5: 1-6.
2. Mork C, Koechlin L, Schaeffer T, Schoemig L, Zenklusen U, et al. (2019) Bretschneider (Custodiol) and St. Thomas 2 Cardioplegia Solution in Mitral Valve Repair via Anterolateral Right Thoracotomy: A Propensity-Modelled Comparison. *Mediators Inflamm* 4.
3. Demir D, Balci AB, Kahraman N, Sunbul SA, Gucu A, et al. (2022) The comparison of del nido cardioplegia and crystalloid-based blood cardioplegia in adult isolated coronary bypass surgery: A randomized controlled trial. *Niger J Clin Pract* 25: 1998-2004.
4. Hoyer A, Noack T, Kiefer P, Kang J, Misfeld M, et al. (2024) Blood versus crystalloid cardioplegia during triple valve surgery: A single center experience. *Perfusion* 39: 948-955.
5. Willekes H, Parker J, Neill Jr, Augustin G, Fanning J, et al. (2024) Efficacy of del Nido cardioplegia in adult cardiac procedures with prolonged aortic crossclamp time. *J Thorac Cardiovasc Surg* 167: 996-1007.

Copyright: ©2024 Serdar Badem. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.