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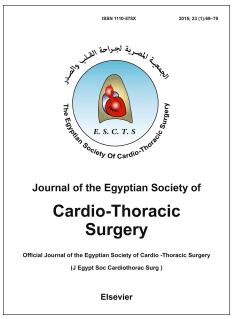

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Faisal A. Mourad, Mohsen. A. Fadala, Ahmed A. Ibrahim, Ayman M. Ammar, Yasser M. Elnahas, Mohamed A. Elghanam, Ibrahim S. Elkilany

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Myocardial protection during CABG: Warm blood versus cold crystalloid cardioplegia, is there any difference?

Faisal A. Mourad, Mohsen. A. Fadala, Ahmed A. Ibrahim, Ayman M. Ammar, Yasser M. Elnahas, Mohamed A. Elghanam, Ibrahim S. Elkilany.

Author's affiliation:
Department of Cardiovascular and Thoracic surgery, Ain Shams University, Cairo.
Corresponding Author:
Faisal A. Mourad
Email: faisalmourad@hotmail.com
Tel: 01277772778

Abstract

Background: Up till now there is lack of consensus to the optimal method for cardioplegia delivery in coronary artery bypass graft (CABG) patients. Various strategies have been developed to minimize ischemic-reperfusion injury.
Aim: To compare cold crystalloid cardioplegia and warm blood cardioplegia in patients undergoing CABG.
Methods: Patients (n=100) undergoing CABG were prospectively randomized into group 1 (n=50) which received antegrade cold crystalloid cardioplegia, group 2 (n=50) which received antegrade warm blood cardioplegia. Blood samples were collected immediately, 12, and 24 hours postoperatively and CK, CKMB, and Cardiac Troponin I were measured and compared between the two groups which were the indicator of myocardial cell injury (the primary end point of this study). Other indicators such as spontaneous defibrillation, use of intra-aortic balloon counter pulsation (IABC), and use of inotropic support were also documented.

Results: Preoperative demographic and clinical variables were matched in both groups. However, intraoperatively, the use of inotropic support