

## Uses of intra-aortic balloon in patients with unstable hemodynamic during coronary artery bypass grafting without cardiopulmonary bypass

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**Objective:** To evaluate the initial results of coronary artery bypass grafting without cardiopulmonary bypass, with use of an intra-aortic balloon pump, hemodynamic support as to prevent the establishment of cardiopulmonary bypass, in cases with intraoperative hemodynamic instability.

**Methods:** Retrospective analysis of a sequential series of 916 patients undergoing coronary artery bypass grafting without cardiopulmonary bypass, between January 2004 and October 2006, of which only 31 (3.4%) required implantation of an intra-aortic balloon. The age ranged 45-83 years ( $62 \pm 20.09$ ), 21 (67.8%) were male. The fraction of left ventricular ejection preoperative ranged from 20% to 35% ( $28.72\% \pm 6.78$ ).

**Results:** The hospital mortality was 3.22%. Only one patient (3.22%) required the establishment of cardiopulmonary bypass. There was no infarction in the perioperative period and no complications associated with intra-aortic balloon was observed. The mean length of stay in intensive care unit was  $2.79 \pm 1.3$  days and hospitalization  $5.6 \pm 1.93$ . The extent of CABG planned preoperatively, was achieved in all patients. Four patients (13%) received a graft, thirteen (43%) received two, eight (26%) received three and six (19%) received four grafts.

**Conclusion:** The early use of an intra-aortic balloon pump, intraoperative for hemodynamic stabilization without use of cardiopulmonary bypass is a viable alternative with good results.

### Biography

Jose De Oliveira Lima graduated in Medicine from the University of São Paulo (1991-1996). Residency in General Surgery at the Hospital of the Faculty of Medicine, University of São Paulo (1997-1998). Resident in Cardiovascular Surgery at the Heart Institute of the Clinical Hospital of the Faculty of Medicine, University of São Paulo (1999-2001). Preceptor, Department of Cardiovascular Surgery, Heart Institute of the Clinical Hospital of the Faculty of Medicine, University of São Paulo (2002-2004). Specialist in Cardiovascular Surgery Brazilian Society of Cardiovascular Surgery. Title of Doctorate in Medicine (Cardiovascular Surgery at the University of São Paulo). Physician, Division of Cardiovascular Surgery, Heart Institute of the Clinical Hospital of the Faculty of Medicine, University of São Paulo-Group of Cardiac Transplantation. Collaborating Professor, Faculty of Medicine, University of São Paulo. Coordinator of the Department of Cardiac Transplantation of the Brazilian Association of Organ Transplantation (ABTO). Practice concentrated in Cardiovascular Surgery, on the following subjects: Surgical Treatment of Heart Failure, Heart Transplantation, Mechanical Circulatory Assist.

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