

Intra-aortic balloon pump applications and coronary revascularization in cardiovascular centers

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We have read with great interest the article by Zeliaś et al. [1] entitled “Hemodynamic effects of larger volume intra-aortic balloon pump during high-risk percutaneous coronary interventions”. First of all, we congratulate the authors for their important contribution to the literature. However, we would like to discuss some issues concerning the intra-aortic balloon pump (IABP) and its applications.

The authors have concluded that a high-volume IABP might have a more favorable hemodynamic profile than the standard IABP. The study was conducted as a prospective randomized controlled study [1]. How did the authors decide whether or not to use the IABP in their patient group (high-risk percutaneous coronary intervention patients)? There are also studies in the literature showing the benefits of using IABP [2]. On the contrary, there is information that IABP use does not affect early-term mortality [3]. What are the authors’ routine practices regarding the use of IABP in high-risk percutaneous coronary intervention patients in daily practice?

In the current study, variables such as acute stroke and contraindications to IABP placement, e.g., due to severe peripheral arterial disease (PAD) were defined as exclusion criteria. The PAD rate was found to be 36.1% in the patients included in the study [1]. According to what criteria was the definition of PAD made in the study? Is IABP placement contraindicated only in patients with severe iliac artery disease? Or was IABP use contraindicated in severe distal vascular patients, considering the possible risk of distal perfusion impairment? Do the authors perform percutaneous interventions to the iliac artery to apply an IABP? Additionally, it

has recently been demonstrated that IABPs have been successfully applied via the axillary percutaneous way [4]. When the authors consider using IABPs in high-risk percutaneous coronary intervention patients in their center, do they use the percutaneous axillary way?

Finally, we would like to comment on the variables defined as “heart failure, n (%)” and “left main stenosis, n (%)” in the study. The heart failure rate was reported as 68.1%. However, all patients had left ventricular ejection fraction equal to or less than 35% [1]. How was the definition of “heart failure” used? The rate of patients with left main stenosis was found to be 68.09% [1]. When we examined the EuroScore II median values reported in the study, this rate seemed high for that intervention. Coronary artery bypass graft surgery may be a better choice for these patients [5]. We would like to receive the authors’ valuable feedback on this subject.

Article information

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