with aortic endocarditis with vegetations. In the aim to reduce risk of further trauma in the dissected aorta, or risk of embolization in the case of endocarditis, and to avoid further delay, the patients had cardiac surgery without previous coronary angiography or other coronary imaging procedures. During aortic crossclamp, the authors performed coronary angiogram by injection of contrast medium into the coronary tree. One patient with endocarditis (a 45-year-old man) had severe coronary lesions and was successfully treated by a venous bypass on the left anterior descending coronary artery. One patient having aortic dissection, who had progression of the dissection on the left main stem, had revascularization too.

Now, the first point is: Should we consider aortic valve endocarditis at the same level of emergency in terms of time allowed for further diagnostic imaging, such as aortic dissection? The authors do not describe any episode of previous embolism in those patients, nor hemodynamic instability, which could explain the reason for no further imaging test so as to not delay the operation.

The second point to address is: Diagnosis of coronary disease was done during cardioplegic ischemic cardiac arrest. Probably this influenced the decision to use a venous graft and not the internal thoracic artery, so as to not prolong crossclamp time.

In our institution, at present, all patients with aortic dissection and patients with aortic valve endocarditis are assessed by dual source (64 × 2) coronary multidetector computed tomography (MDCT) scan. This is fast and may be considered an alternative to invasive preoperative study.

The quantification of coronary artery calcium (CAC) is a marker for atherosclerosis. The extent of CAC correlates with the magnitude of atherosclerotic plaque burden and with subsequent coronary events.² Nowadays, there are many cardiology reports on the use of MDCT scan as

a screening tool to exclude critical coronary disease in different clinical settings, even in the Emergency Department in patients with chest pain of suspected coronary etiology.³ Recent reports on preoperative computed tomographic coronary angiography in patients referred for cardiac valve surgery showed a good accuracy to exclude relevant coronary stenosis,⁴ with a sensitivity up to 96%, specificity of 87%, positive predictive value of 61%, and negative predictive value of 99% for the detection of significant lesions ($\geq 50\%$ diameter stenosis). An overestimation of mild lesions is the main reason for false-positive results. Usually, this limitation of computed tomographic scan is represented by an overestimation of stenosis, especially in the presence of calcifications. The specificity and sensitivity, especially in the exclusion of significant lesions, may be of help before cardiac surgery.

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Reply to the Editor:

We thank Lentini and colleagues for their interest in our recent article "Intraoperative coronary angiography in the management of patients with acute aortic dissection and endocarditis."¹ The 2 important issues highlighted by the authors in their Letter to the Editor reinforce important concepts from our article. The first issue is the level of emergency of aortic endocarditis. In our opinion, the indications to use intraoperative coronary angiography for acute endocarditis or for aortic dissection should be differentiated. Early surgical intervention is mandatory for patients with type A aortic dissection, as the authors note in their letter. However, in patients with acute endocarditis, the time-sparing effect does not stay in the foreground. Shamsham and colleagues² described cases of infective coronary embolism after diagnostic preoperative coronary angiography. Our aim was to prevent possible complications by means of intraoperative coronary angiography. The decision not to use multidetector computed tomography (MDCT) in this kind of patient is also related to the reduced hemodynamic and renal function and to minimize the amount of nephrotoxic contrast medium, which is 10- to 15-fold higher in MDCT than in coronary angiography, as stated in our article.¹ When patients are admitted to our hospital primarily without clear diagnostics, we also perform MDCT following a chest pain protocol,³ which in addition to the aortic depiction also includes the coronary status. We believe that preoperative coronary angiography should generally be avoided for both diagnoses, and as the authors propose, imaging methods like MDCT have to be considered. However, in most cases, the patients arrive at our department with a computed tomographic scan performed elsewhere, with no option for depiction of the coronary vessels. In these cases, we must do a second computed tomography, which incurs

a minimum 45-minute delay including in-house transportations with the additional risks of further worsening of the disease by blood pressure peaks and by shifting the patient to the computed tomography table and back.

The second point addressed by Lentini and associates is the coronary diagnostic during cardioplegic ischemic arrest. We agree with the authors of the letter that the use of a left internal thoracic artery bypass was not chosen to avoid a prolongation of the crossclamp

time, which was exactly our intention. Intraoperative coronary angiography permits a direct reaction to the possible coronary disease as well as surgical correction without time loss, avoiding possible myocardial ischemia.

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