2011 ACCF/AHA Guideline for Coronary Artery Bypass Graft Surgery: A Report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines

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Perspective:

The following are 10 points to remember about these guidelines on coronary artery bypass graft surgery (CABG):

1. If possible, the left internal mammary artery should be used to bypass the left anterior descending (LAD) artery when bypass of the LAD artery is indicated.

2. Intraoperative transesophageal echocardiography should be performed for evaluation of acute, persistent, and life-threatening hemodynamic disturbances that have not responded to treatment, and in patients undergoing concomitant valvular surgery.

3. Management targeted at optimizing the determinants of coronary arterial perfusion (e.g., heart rate, diastolic or mean arterial pressure, and right or left ventricular end-diastolic pressure) is recommended to reduce the risk of perioperative myocardial ischemia and infarction.

4. Emergency CABG is recommended in patients with acute myocardial infarction in whom: 1) primary percutaneous coronary intervention (PCI) has failed or cannot be performed, 2) coronary anatomy is suitable for CABG, and 3) persistent

ischemia of a significant area of myocardium at rest and/or hemodynamic instability refractory to nonsurgical therapy is present.

5. A Heart Team approach to revascularization is recommended in patients with unprotected left main or complex coronary artery disease.

6. CABG to improve survival is recommended for patients with significant (≥50% diameter stenosis) left main coronary artery stenosis, in patients with significant (≥70% diameter) stenoses in three major coronary arteries (with or without involvement of the proximal LAD artery), or in the proximal LAD plus one other major coronary artery.

7. CABG or PCI to improve symptoms should not be performed in patients who do not meet anatomic (≥50% left main or ≥70% nonleft main stenosis) or physiological (e.g., abnormal fractional flow reserve) criteria for revascularization.

8. If aspirin was not initiated preoperatively, it should be initiated within 6 hours postoperatively and then continued indefinitely to reduce the occurrence of saphenous vein graft closure and adverse cardiovascular events.

9. All patients undergoing CABG should receive statin therapy, unless contraindicated, to achieve a goal of low-density lipoprotein cholesterol <100 mg/dl.

10. Cardiac rehabilitation is recommended for all eligible patients after CABG.

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