

Prophylactic Left Internal Mammary Artery Graft In Mildly-Stenosed Coronary Lesions. Still an Open Discussion

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I have read the article entitled "Prophylactic Left Internal Mammary Artery Graft in Mildly-Stenosed Coronary Lesions. Still An Open Discussion" by Evora et al.¹ with great interest, recently published in *Arquivos Brasileiros de Cardiologia*. The investigators reported that the idea of a prophylactic left internal mammary artery (LIMA) on left anterior descending in mild-stenosed vessels is not confirmed yet by clinical evidence.¹

Berger et al.² reported that all moderate coronary lesions should be LIMA grafted during primary coronary bypass surgery.

Coronary angiography, anyhow quantitative, remains a relatively weak tool to determine the functional repercussion of a stenosis. Thus, it is likely that some lesions with a

diameter stenosis < 50% were actually hemodynamically significant and, on the contrary, that stenoses with a diameter stenosis > 50% were not. Fractional flow reserve (FFR) is a guide wire-based index derived from intracoronary pressure measurements that has been shown to evaluate the functional significance of a coronary stenosis much more accurately than angiography.³ FFR has been shown to be a predictable surrogate for noninvasive stress testing and is thus a useful tool in determining the suitability of revascularization.⁴

In the light of these knowledges, FFR might be a useful tool to evaluate moderate coronary lesions with regard to revascularization appropriateness.

Keywords

Coronary Artery Disease/surgery; Mocardial Revascularization; Mammary Arteries; Coronary Stenosis

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Reply

The author(s) letter is based mainly on the excellent study carried out by Berger et al.¹ who reported that all moderate coronary lesions should be left internal mammary artery (LIMA) grafted during primary coronary bypass surgery.

Coronary angiography, anyhow quantitative, remains a relatively weak tool to determine the functional repercussion of a stenosis. In other words, the coronary angiography can underestimate the real degree of the artery obstruction. Fractional flow reserve might be a useful tool to evaluate moderate coronary lesions with regard to revascularization appropriateness.

Thank you very much for adding the important lesson that the “prophylactic left internal mammary artery graft in mildly-stenosed coronary lesions”, implies in the development of better tools. The coronary flow quantification improvement would be associated with a more comfortable adoption of the Berger opinion that “all moderate coronary lesions should be LIMA grafted during primary coronary bypass surgery”. However, the discussion remains open.²

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