Response to Letter Regarding Article, “Thermodilution-Derived Coronary Blood Flow Pattern Immediately After Coronary Intervention as a Predictor of Microcirculatory Damage and Midterm Clinical Outcomes in Patients With ST-Segment–Elevation Myocardial Infarction”

We thank Drs Echavarría-Pinto and Escaned¹ for their interest in our article.² To analyze coronary blood flow pattern, thermodilution curves need to be obtained by brisk injection of 3 mL of room temperature saline by hand into the coronary artery through the guiding catheter at steady-state hyperemia.³ As pointed by Drs Echavarría-Pinto and Escased,¹ however, the shape of thermodilution curve could be changed by the vascular volume between the tip of the guiding catheter and the location of the sensor. Although the interobserver reproducibility for the shape of thermodilution curve was not tested, we think that the measurement error for thermodilution curve was minimal. During the measurement, the sensor was positioned at a point 7 cm distal from the ostium of each coronary artery and steady-state maximum hyperemia was obtained.

The index of microcirculatory resistance values were significantly lower in the narrow unimodal group than in the wide unimodal and the bimodal groups (20±9, 65±41, and 76±38 U, respectively; P<0.001). We showed our data and we adjusted for multiplicity using the Bonferroni method. No significant difference existed in index of microcirculatory resistance values between the wide unimodal and the bimodal groups (P unadjusted=0.366; P adjusted=0.66).

We think that this easily assessable coronary flow patterns are useful in clinical risk stratification for patients with ST-segment–elevation myocardial infarction.

Disclosures

None.

References


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Circ Cardiovasc Interv. 2014;7:418
doi: 10.1161/CIRCINTERVENTIONS.114.001589
Circulation: Cardiovascular Interventions is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
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Print ISSN: 1941-7640. Online ISSN: 1941-7632

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http://circinterventions.ahajournals.org/content/7/3/418

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