To the Editor:

Toth et al performed a well-organized, web-based, international survey on interventional strategies in patients with stable angina and intermediate coronary lesions. After a total of 4421 lesion evaluations, interventional cardiologists relied solely on angiographic appearance in 71% of cases. Importantly, such a behavior resulted in discordance with known fractional flow reserve (FFR) in 47% of them. Conversely, FFR and other imaging modalities were used only in a minority of cases. The authors concluded that, despite current recommendations, visual estimation continues to dominate treatment decisions for intermediate coronary stenosis.

We definitely agree with the authors’ apprehension about the low rate of FFR use in the evaluation of intermediate lesions in real-life practice. This attitude assumes even greater relevance if we consider that physicians were not provided with noninvasive proof of ischemia for the targeted lesion. Being this a virtual study, external barriers could play only a marginal role. Conversely, individual behavior (the so-called human barrier), including inertia of previous practice, lack of agreement with guidelines, awareness, self-efficacy, or outcome expectancy, was regarded as the key determinant to the low rate of guideline adherence.

However, in our opinion, individual behaviors reflect uncertainties of the whole cardiology community. In recent guidelines, the Fractional flow reserve versus Angiography for Multivessel Evaluation 2 (FAME-2) trial, which reported on the efficacy of FFR-guided percutaneous coronary intervention versus medical therapy in stable coronary artery disease, is referred to as the mainstay study for changing practice. The trial was prematurely interrupted because of the statistically significant difference between treatment groups. Nonetheless, similar to the Clinical Outcomes Utilizing Revascularization and Aggressive Drug Evaluation (COURAGE) trial, the rate of revascularization was the only outcome to significantly differ. The recently published 2-year outcomes of the same patient cohort showed similar results, with death or myocardial infarction rates being lower in the percutaneous coronary intervention group only when additional and separate statistical analysis was performed. Therefore, critical interpretation of these findings suggests that, after invasive assessment with FFR, we need to treat 12 patients with significant obstruction to prevent one urgent revascularization procedure, without affecting death or myocardial infarction rates.

In conclusion, the International Studies of Infarct Survival (ISIS) trial documents the failure of the FAME-2 study to change practice.

Therefore, contrary to previous quotations, FAME-2 should be regarded as a missed opportunity to significantly affect the firmly established principles of old paradigms in ischemic heart disease. Until robust and clinically relevant data are available, potentially relevant treatments will likely continue to be underused.

None.

References


Letter by Huqi et al Regarding Article, "Revascularization Decisions in Patients With Stable Angina and Intermediate Lesions: Results of the International Survey on Interventional Strategy"

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