

Fractional Flow Reserve–Guided Lesion or Patient Management?

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To the Editor: In one of the latest issues, Hu *et al.* carried out a national retrospective cohort study and investigated the clinical outcomes and cost of fractional flow reserve (FFR) guided percutaneous coronary intervention (PCI) in daily practice.^[1] FFR guided PCI was shown to improve the clinical outcomes with reduced cost, as demonstrated in the literature. We would like to expand the discussion part a little to figure out this issue more comprehensively.

Initially, the outcomes of the FAME 2 trial within 2 years was published in 2014.^[2] The results were similar to those of the landmark trial of FAME 2 published in 2012.^[3] Moreover, in a recently published meta-analysis, it was stated that the deferral of PCI based on FFR was a safe strategy.^[4] An invasive study based on FFR not only help us to decide whether to perform the intervention to an individual lesion, but also may change significantly the patient management strategies, as clearly shown in the RIPCORD study.^[5]

Based on the studies, the European guideline recommends FFR to identify hemodynamically relevant coronary lesion(s) in stable patients when the evidence of ischemia is not available as Class I A. FFR-guided PCI in patients with multivessel disease is recommended as Class IIa with B level of evidence.^[6]

Another important issue is how to use FFR in patients with acute coronary syndrome. In fact, there is no clear suggestion, and the studies are ongoing. At this point, the FAMOUS-NSTEMI trial should be emphasized. In one-fifth of the patients, the FFR-guided approach changed the stenosis classification and patient management. The angiography-guided management was associated with higher rates of coronary revascularization when compared with FFR-guided management.^[7]

As a result, the decisions taken based on the FFR seem to have a positive impact on clinical outcomes in daily practice. It seems to counter balance an increased cost at the beginning. Furthermore, FFR may have influence on the decision of the lesion and also patient management.

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Conflicts of interest

There are no conflicts of interest.

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