Reviewer’s report

Title: Distal Left Circumflex Coronary Artery Flow Reserve Recorded by Transthoracic Doppler Echocardiography. A Comparison with Doppler-Wire.

Version: 1 Date: 25 April 2007

Reviewer: Fausto Rigo

Reviewer’s report:

General

The paper “Distal Left Circumflex Coronary Artery Flow Reserve Recorded by Transthoracic Doppler Echocardiography. A Comparison with Doppler-Wire” written by Dr Auriti where these Authors evaluating the circumflex coronary artery represents a promising step forward towards a complete non-invasive coronary investigation in clinical practice. However, I would like to underline the these aspects:

In four out five patients they found a strong relationship in terms of CFR between TTDE and DW and this represents a highly positive message regarding the absolute value of TTDE also when applied in this minor coronary vessel. The discrepancy of CFR value found in the Pt 1 probably lies in the fact that quantitative angio was recorded on a distal part of circumflex while the TTDE was obtained more proximally.

It would be better if the Author highlighted some technical details regarding the depth where the sample volume was placed, if they were guided by the left atrial appendage in choosing the coronary as Circumflex and if they adopted the angle correction.

I would like to know if, during the same examination, they were able to record coronary flow velocity and reserve in the other two coronary arteries such as LAD and PDCA and in particular if they compared the flow velocities each other. If so, this experience would represent an important and encouraging step forward in a more complete and non-invasive diagnosis of coronary artery disease.

What next?: Accept after discretionary revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.