Dear Editor,

Two-dimensional (2D) echocardiography is a powerful tool for assessment of mitral regurgitation (MR) [1]. However, it bears several major disadvantages. Evidence suggests that measurement of the vena contracta area (VCA) via a three-dimensional (3D) method is significantly more accurate than 2D methods in the quantification of MR since the 2D method is not sufficiently reliable in calculation of VC diameter because of circular assumption of VC area [2]. VCA direct planimetry (DP) and multiplanar reconstruction (MPR)-derived VCA are direct and reliable methods to quantify MR severity, and their results are comparable with those of 2D integrative method [2, 3]. It is strongly recommended that these methods especially DP can replace 2D methods in the quantification of MR in the clinical practice, as it is more accurate and easy to perform [3].

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