The Most Accurate Method for Measurement of Mitral Valve Area in Mitral Stenosis by Direct Planimetry Three Dimensional Transesophageal Echocardiography (3D TEE)

Mehrnoush Toufan¹, Naser Khezerlouy Aghdam²*

¹Professor of cardiology, fellowship of echocardiography, cardiovascular Research Center, Tabriz University of Medical Sciences, Tabriz, Iran
²Naser Khezerlouy Aghdam, Assistant fellowship of echocardiography, Cardiovascular Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

Corresponding Author: Naser Khezerlouy Aghdam, MD, Assistant fellowship of echocardiography, Cardiovascular Research Center, Tabriz University of Medical Sciences, Tabriz, Iran. Tel: 009841333363908 E-mail: nkhezerlou90@gmail.com

DEAR EDITOR,

Three-dimensional (3D) transesophageal echocardiography (TEE) is a powerful tool for assessment of mitral valve area with multiplanar reconstruction (MPR) or direct planimetry in patients with rheumatic mitral valve stenosis. Two-dimensional transthoracic echocardiography (2D TTE) is a well-known conventional method in these patients which is used routinely. This method is less accurate than 3D TEE because mitral valve is saddle shaped and 2D images cannot image this valve correctly [1-7]. Exact method for 3D mitral valve area measurement is not determined yet and MPR was used as an accurate method. Direct planimetry by 3D TEE emerged as a novel method to evaluate mitral valve area with least variability [8].

ACKNOWLEDGMENTS

The manuscript was derived from the dataset of Naser khezerlouy’s subspecial dissertation entitled “Mitral Valve Planimetry with Direct Three Dimensional (3D) Echocardiography compared to Multiplanar Reconstruction (MPR)”.

REFERENCES