Prevalence and Characteristics of Silent Mitral Regurgitation

Rosenmann, David; Butnaru, Adi; Klutstein, Marc; Shaheen, Joseph; Balkin, Jonathan; Farkash, Rivka; Tzivoni, Dan
Shaare Zedek Medical Center, Jerusalem, Israel

In clinical practice, mitral regurgitation (MR) is often silent and not infrequently there is no correlation between severity of MR and intensity of the systolic murmur. Surprisingly there is very scanty literature on the frequency and characteristics of silent MR.

Aim: To evaluate the prevalence and characteristics of silent MR.

Methods: All patients attending our outpatient clinic from 1992 - 2010 with severe or moderate to severe MR on repeat echo studies, were selected from our database. The presence of a holosystolic or a late systolic murmur was used to define audible or silent MR.

Results: Of the 418 patients (age 71+14), 312 (75%) had a holosystolic or late systolic murmur and 106 had silent MR. No significant difference in risk factors between both groups was found. Details and characteristics of both group appear in Table.

Conclusions: Silent MR is observed in about 25% of patients with significant MR. It is more frequent in patients with poor left ventricular function (43%), ischemic heart disease (33%), and dilated left and right ventricle, and anatomically normal valve (38%). No patient with flail leaflet had silent MR.