1550846

Is Aortic Dilatation Associated with Mitral Valve Prolapse?

Monakier, D; Bental, T; Shapira, Y; Vaturi, M; Weisenberg, D; Battler, A; Sagie, A
Rabin Medical Center, Beilinson Hospital, Petah Tikva, Israel

Background: In a previous study we suggested that the presence of aortic dilatation, among other factors, was associated with worsening mitral regurgitatnion (MR) in patients with mitral valve prolapse (MVP). Since an association between MVP and aortic dilatation has not been described for the general population, we designed a study to assess the existence of such a possible association.
Methods: Retrospective echocardiographic study, performed at a single referral center. Mitral valve prolapse was defined as prolapse of 2 mm or more above the mitral annulus. The aorta was considered dilated if the root diameter or ascending aorta diameter were > 37mm.
Results: From a database of 100317 patients who had echogardiographic studies, we identified 2492 patients with mitral valve prolapse (2.5%). Aortic dilatation was present in 240 of patients with MVP (9.6%) and in 8039 patients without MVP (8.95%), p = 0.0002. Bicuspid aortic valve (BAV) was present in 4.2% (10 patients) of those with MVP and aortic dilatation and in 4.6% (366 patients) of those with MVP but no aortic dilatation (p=0.9). Significant MR (moderate to severe or severe) was present in 29.6% of patients with MVP and aortic dilatation. Conclusion: Aortic dilatation was slightly but significantly more prevalent in patients with MVP than in patients without MVP. Further studies are warranted for the assessment of this association.