

### Mitral Valve Prolapse Masquerading as Atypical Cardiac Symptoms

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**INTRODUCTION:** Mitral valve prolapse (MvP) is a Congenital Heart Disease (CHD), defined as an abnormal displacement of the mitral valve leaflets into the left atrium during systole. It has been thought to be mostly an incidental finding during echocardiography assessment. It can frequently masquerade as an element of syncope or even other atypical cardiac symptoms and signs such as easy fatigability, dizziness, palpitations, atypical chest pain. Occasionally, arrhythmias can be observed, associate with increased parasympathetic tone. Although thought to be a benign condition it needs to be detected and followed-up mostly when mitral regurgitation is present.

**AIM:** Describing the ever first incidence, clinical presentations and morphology of the defect by echocardiographic assessment of MvP in Azerbaijan by a retrospective study.

**POPULATION-METHOD:** Since August 2012, in three referral centers for CHD, 2160 patients age one day to 57 years old, (mean age 8+/- 6years) were referred with suspicion of cardiac symptoms and or signs. From the patients that were diagnosed with MvP, their medical records and additional studies(Holter-ECG) were reviewed.

**RESULTS:** We excluded all syndromes, cardiomyopathies and complex CHD that may involve as an element MvP. Using the echocardiographic criteria of the historical study by Freed et.al [N Engl. J Med. 1999 Jul 1;341(1)], we found:90patients with MvP (incidence 4.17%). From these 57(63%)were females.51/90(57%) presented with symptoms and/or signs. Specifically: a.21/90(23%) with palpitations or arrhythmia detected on 24h Holter ECG (premature atrial and /or ventricular beats, more than 15% of regular beats, episodes of Mobitz type I and episodes of non-sustainable junctional rhythm, b. 17/90(19%) complained of frequent atypical sharp non- sustainable chest pain, c. 5/90(5.56%) had suffered a typical vasovagal syncope and 8/90(8.9%) from pre-syncope. Regarding the morphology of MvP: 63/90(70%)involved the anterior leaflet,12/90(13.4%) both and 15/90(16.7%) the posterior leaflet. Regarding the amount of regurgitation: 52/90(57.8%) was trivial to mild-vena contracta<2mm-,24/90(26.7%) mild- vena contracta 2-3mm- and 16/90(13.5%) mild to moderate -vena contracta>3<5mm-.

**CONCLUSIONS:** MvP has a high incidence in Azerbaijan, with a unique morphology (mostly anterior leaflet prolapse) and can not only masquerade as atypical cardiac symptoms but also frequently 13.5% involve significant MvR+.