Introduction

The mitral valve is the heart valve that prevents the backflow of blood from the left ventricle into the left atrium. It is composed of two leaflets (one anterior and one posterior) that close when the left ventricle contracts **(Topol et al., 2004).**

Mitral valve prolapse (**MVP**); is a valvular heart disease characterized by the displacement of an abnormally redundant thickened mitral valve leaflet into the left atrium during systole**(Sutton et al., 2002)** more than 2 mm above the mitral annulus high points**(Freed et al., 1999).**

Mitral valve prolapse is classified into several subtypes, based on leaflet thickness, concavity, and type of connection to the mitral annulus. Subtypes can be described as classic, non-classic, symmetric, asymmetric, flail, or non-flail **(Freed et al., 1999).**

Most cases are primary, idiopathic in nature, and expressed as an autosomal dominant trait that exhibits both sex- and age-dependent penetrance**(Robert , 2005)** , so mitral valve prolapse classified into primary form as in familial , non-familial types, Marfan syndrome, Ehlers-Danlos syndrome (i.e.; types I, II, IV)and Myotonic dystrophy or secondary form as in coronary artery disease and hypertrophic cardiomyopathy**(Topol et al., 2004).**

The incidence of mitral valve prolapse in the general population varied greatly. Some studies estimated the incidence of mitral valve prolapse at **5%-15%** or even higher **(Leavy et al., 1987)**,and the female-to-male ratio is approximately 3:1,but in recent studies , this incidence is reduced to **0.6% - 2.4%** , and became equal between males and females(**Sutton et al., 2002**) The age of onset is 10-16 years. MVP is uncommon before the adolescent. It is usually detected in young adulthood **(Flack et al., 2007).**

As regard to the clinical picture of the disease, it is usually asymptomatic and discovered accidentally during auscultation or by echocardiography for any other clinical reason. Symptomatic group of patients with MVP experience palpitations , syncope, moderate chest pain, dyspnea, or neuropsychiatric symptoms **(Bouknight et al., 2000).**

The diagnosis of MVP is sometimes considered in patients who have thin body built with narrow antero-posterior diameter of the chest, Skeletal abnormalities (i.e.; pectus excavatum, straight back, kypho-scoliosis) **(Bouknight et al., 2000)** and in females with hyperlaxity and high flexibility of their joints **(Araujo et al., 2008).**

The major predictors of mortality are the severity of mitral regurgitation and the ejection fraction **(Sutton et al., 2002)**. Generally, MVP is a benign disorder with law mortality rate. However, MVP patients with a

murmur, not just an isolated click, have a general mortality rate that is increased by 15-20% **(Leavy et al., 1987).**

Most patients need only reassurance, those with mitral valve prolapse and symptoms of dysautonomia (palpitations, chest pain) may often get benefit from β-blockers. Patients with prior stroke and/or atrial fibrillation may require blood thinners, such as aspirin or warfarin. Mitral valve prolapse associated with severe mitral regurgitation can be treated with repair or surgical replacement of the mitral valve**(Bonow et al., 2006).**