Summary

Mitral valve prolapse is defined as systolic displacement of one or both of an abnormally thickened, redundant mitral leaflet into the left atrium during systole. This valvular abnormality has been associated with mid systolic clicks, late systolic murmurs, and serious complications such as bacterial endocarditis, severe mitral regurgitation, and sudden death.

This study, which aimed to compare the incidence, clinical, and morphological differences between young Egyptian male and female mitral valve prolapse patients, was carried out on (**2500**) individual divided into **787** female and **1713** male.

Sixty of them were diagnosed as mitral valve prolapse patients **(38 male and 22 female)** by using transthoracic two dimensional and M-mode echocardiography.

All of these individuals asked for medical advice at the outpatient clinic of Cardiology Department of Benha University Hospital and Damanhur National Medical Institute, and were selected in a randomized manner.

The study started from *January 2009* to *January 2010*. All of the patients, symptomatic or asymptomatic, were primary mitral valve prolapse under the conditions of the inclusion and exclusion criteria.

Data collected from the patients after history taking, clinical examination and investigations were analyzed statistically and tabulated

to achieve the goal f the study. All of the findings will be discussed in view of the aim, their significance and their comparison with other available data.

In conclusion of this study, it showed that, mitral valve prolapse incidence is **2.4**% and it is semiequal between both sex groups. Egyptian female patients with mitral valve prolapse have important clinical and morphological differences compared with male patients. Also they presented often with less symptoms, blood pressure measurements, body surface area, posterior leaflet prolapse, flail leaflets, incidence of mitral regurge severity, and smaller intracardiac diameters.

Also female patients presented with more leaflet thickness, bileflet prolapse, and anterior leaflet prolapse. Although the presentation of mitral valve prolapse is more often benign in female patients, this setting represents a clinical challenge. In female patients, assessment of cardiac enlargement using absolute intracardiac dimensions is problematic, because after normalization of these dimensions to body surface area, this sex specific difference is lost.

At the end of this study, recommendations such as; increasing the number of patients, increasing the duration of the study, lengthening the follow up of the patients to detect any change in the incidence of mitral regurge or any other complications, and searching for the effect of normalized intracardiac dimensions to body surface area on the prognosis and outcomes of mitral valve prolapse are needed.