## SUMMARY AND CONCLUSION

This study was carried out on 40 patients had mitral valve disease. Their ages ranged from 2 months to 5 years. They were 22 females and 18 males. All patients were chosen from the cardiology clinic of the new pediatric Hospital, Cairo University in a period of six months.

The patients were divided into two main groups :

- 1- Congenital mitral valve disease group.
- 2- Acquired rheumatic valve disease group.

All patients studied were subjected to general and local clinical examination for diagnosis and evaluation of the type and extent of the mitral valve disease.

Some laboratory investigations as E.S.R, ASOT and CRP were done to confirm the rheumatic cause of mitral valve disease in suspected patients. ECG and chest radiography were carried out for all patients to confirm the diagnosis. Combined M-mode, two dimensional and doppler echocardiography were also performed to identify the mitral valve lesion and other associated cardiac defects.

Congenital mitral valve disease group included 30 patients 75%,16 females and 14 males and their ages ranged from 2 months to 5 years. Congenital mitral regurgitation was diagnosed in 10 patients 25%, 6 males and 4 females and their ages ranged from 2 months to 5 years.

Dilated cardiomyopathy was diagnosed in 6 patients 15%,2 females and 4 males and their ages ranged from 1, 1/2 ys to 3 1/2 ys. Cleft mitral valve was diagnosed in 4 patients 10%, 2 females and 2 males and their ages ranged from 6 months to 5 years. Mitral valve prolapse was diagnosed in 7 patients 18%, 6 females and 1 male and their ages ranged from 1 1/2 years to 4 1/2 years. Congenital mitral stenosis was diagnosed in 3 patients 8% 1 male and 2 males and their ages ranged from 3 months 3, 1/2 ys.

Acquired rheumatic mitral valve disease group included 10 patients 25%, 6 females and 4 males and their ages ranged from 4 years to 5 years. All the 10 patients had mitral regurgitation and associated mitral stenosis was found in 2 patients.

This work showed the following facts:

- 1- Mitral valve can be severely affected in children below
  5 years of age due to different congenital and acquired causes.
- 2- History taking and physical examination can not surely diagnose the cardiac defects, valve functions and the degree of haemodynamic changes in mitral valve disease.
- 3-Effective non-invasive investigations are simple and not expensive. They can be done easily at any age and under any conditions without harmful effect and they are considered the best way to determine the presence or absence of heart disease and the need for further work up.