SUMMARY AND CONCLUSION

The aim of this work was to assess the pattern of CHD in pediatric patients of Down syndrome using echocardiography.

The study was conducted on 120 of pediatric patients of Down syndrome attending pediatric department of Benha University Hospital.

All the studied cases were subjected to

- Full history taking laying stress on: mother's age, history of arrhythmia, fainting episodes, palpitations, chest pain or cyanosis secondary to heart lesion, history of sleep apnea, including snoring, restlessness during sleep & genetic counseling.
- Full clinical examination of DS children including: general, neurological& cardiac examination.
- Echocardiography in cardiology unit of pediatric department of Benha University Hospital.

The study revealed that the incidence of Down syndrome rises with increasing maternal age. Many specialists recommend that women who become pregnant at age 35 or older undergo prenatal testing for Down syndrome.

There are about (52.5%) of Down syndrome patients suffering from congenital heart defects.

The most frequent defect is ventricular septal defect (41.27%), complete atrioventricular canal defect (CAVC) (30.15%), secundum atrial septal defect (14.30%), isolated patent ductus arteriosus (11.30%) and tetralogy of Fallot (3.17%). (19%) developed pulmonary hypertension

About 11% of patients have several cardiac defects; the most common lesions are patent ductus arteriosus.

The genetic counseling is performed in (65%) of the studied cases.

The karyotyping revealed that the nondisjunction type contributes (98.7 %) and translocation type (1.3 %).