

# **ROLE OF FETAL ECHOCARDIOGRAPHY IN DIAGNOSIS OF FETAL CONGENITAL HEART DISEASE**

Thesis

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in Radiodiagnosis*

*Presented By*

**Samar Hosny Hassan Suliman**

Faculty of Medicine – Ain Shams University

*Supervised By*

**Prof. Dr. / Amani Emad Eldin Radi**

Professor of Radiodiagnosis

Faculty of Medicine – Ain Shams University

**Dr. / Yasser Ibrahim Abdelkhalek**

Lecturer of Radiodiagnosis

Faculty of Medicine – Ain Shams University

**Dr. / Ali HagagAli**

Lecturer of Radiodiagnosis

Faculty of Medicine – Ain Shams University

**Faculty of Medicine  
Ain Shams University**

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## **INTRODUCTION**

Congenital heart disease is a leading cause of infant morbidity and mortality, Accurate prenatal diagnosis offers potential clinical benefit with regard to infant outcome.

Fetal echocardiography is broadly defined as a detailed sonographic evaluation that is used to identify and characterize fetal heart anomalies before delivery. This specialized diagnostic procedure should be performed only when there is a valid medical reason, and the lowest possible ultrasonic exposure settings should be used to gain the necessary diagnostic information. While it is not possible to detect every abnormality, adherence to the proper parameter will maximize the probability of detecting most cases of clinically significant congenital heart disease.

When congenital heart disease is diagnosed during fetal life, the expectant parents should have a detailed discussion with a fetal cardiologist with regard to the prognosis of the cardiac lesion, covering not only procedural risks, but also long-term mortality, morbidity, and quality of life. There should also be a discussion with regard to possible associations, including karyotypic abnormalities, noncardiac structural anomalies, and syndromes to have a full picture of the prognosis for their baby.

Depending on the severity of the cardiac lesion, the associated abnormalities, gestational age, and local laws, one of the options open to parents may include termination of pregnancy.

## **AIM OF THE WORK**

The aim of the current study is to evaluate the role of fetal echocardiography in diagnosis of different fetal congenital heart disease in high risk pregnancies compared to non risk pregnancy in order to assess how the fetal echocardiography is beneficial in early diagnosis and management of fetuses with congenital heart diseases.