

# ORIGINAL RESEARCH PAPER

Gynaecology

# PREGNANCY WITH HEART DISEASE

KEY WORDS: Pregnancy,

Heart disease

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BSTRACT

Cardiac disease remains a major cause of morbidity and mortality in pregnant and post-partum women. Aim of this review is to provide a brief overview of current knowledge and practice in the field, with an emphasis on the major physiological changes which occur during pregnancy, clinical assessment in pregnancy, management of delivery (concentrating on managed vaginal delivery), drug treatment, key conditions and risk assessment. The latter factor is particularly important in terms of being able to identify high-risk women earlier and to counsel them appropriately. Pregnant women with cardiovascular conditions can, with appropriate knowledge and counselling, be managed safely in specialist multidisciplinary services.

#### INTRODUCTION

Cardiac diseases affects 1-2% of all pregnancies. It is one of the leading causes of maternal mortality and morbidity. It causes higher incidence of fetal and neonatal adverse outcomes. Rheumatic heart disease is commonest, complicating pregnancy in our country. Due to advancements in medical and surgical fields which have improved survival rates in CHD, now the ratio changes from 10:1 to 3:1 or even 1:1 in advanced countries.

### **AIMS & OBJECTIVES**

Prospective study : one and half year, at JLNMCH ,Bhagalpur, Bihar.

Early diagnosis, identification of risk factors, anticipating complication & adequate management of complication.

- · Incidence & frequency of different types of cardiac lesion.
- · Different types of valvular lesion & their outcome.

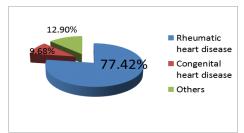
Mode of delivery &fetomaternal outcome

**INCLUSION CRITERIA:** All pregnancies with heart disease. **EXCLUSION CRITERIA:** Heart disease with ectopic ,molar pregnancy.

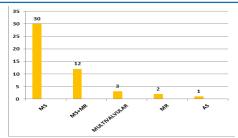
Complete evaluation was done .Detailed clinical history, Laboratory data analysis. USG, Chest X ray, ECHO ,detailed CVS examination and patients followed till delivery.

### **OBSERVATION & DISCUSSION**

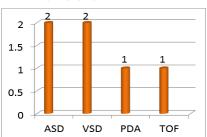
- In this present study period, there were 62 confirmed cases of heart disease out of 15450 antenatal cases, giving an incidence of 0.40%. World wide incidence 1 to 3%. India it ranges <1%.</li>
- Out of 62 cases ,42 were booked cases and 20 unbooked cases.26 were primi and rest multi.
- 11 patients were between the age group of 15 to 25 years, 37 in the age group of 26 to 35 years and rest 14 above 35 years.



Above data is with sudies of Mainak et al ,2014(74%), But lower than studies of Jones et al ,1951(90%) & Mendelson et al ,1960(91.4%).

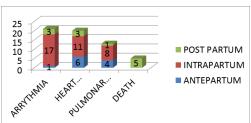


#### VALVULAR AFFECTION IN RHD



#### TYPE OF CONGENITAL HEART DISEASE

In this case series mitral stenosis was commonest lesion (62.5%) which was similar to the studies of Mainak et al 2014(67.85%) and Farhana A et al 2005(63.64%). Out of the 10 congenital heart disease cases most common was ASD and VSD.



# DISTRIBUTION OF HEART DISEASE RELATED MATERNAL COMPLICATION

The most common heart disease related complication was arrhythmia like the study of Moodley J et al,2008(9.47%) and S Kumari et al,2003(20%). This disparity between results were due to the fact that pregnancy itself is a proarrhythmic state due to alteration of haemodynamic state and also most of the patients in this series were in labour at the time of admission . The fact was proved by most of arrhythmia occurred intrapartum period. Next most common complication was heart failure which was comparable with the studies of

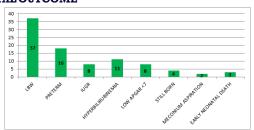
Allahbadia G et al, 1989 (32%), Lahiri D et al, 1995 (35%).

#### MODE OF DELIVERY:

In this study group out of 62 patients 45(72.58%) patients underwent vaginal delivery which is lower than studies of Sanyal C et al,1996(90%) but higher than studies of Tayyiba Wasim et al,2008(68.13%). Rest underwent LSCS.

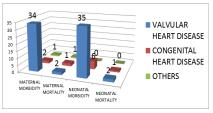
Out of 45 vaginal delivery, 19 were spontaneous delivery. Episiotomy was given in 16 cases, ventouse delivery in 8 cases and outlet forceps applied in 3 cases.

# FETAL OUTCOME



Out of 62 cases, fetal morbidity was seen in 41 cases (66.13%) and fetal mortality in 3 cases (4.84%). Clark et al had 32% of fetal morbidity and 3.1% of fetal mortality. Amans et al had 70% fetal morbidity and 11.9% of fetal mortality.

# FETO MATERNAL OUTCOME IN RELATION TO TYPES OF HEART DISEASE



Clark et al had 52% of maternal morbidity and 0.2% of maternal mortality. Amans et al had 80% maternal morbidity and 6.2% of maternal mortality.

#### CONCLUSION

Rheumatic heart disease is commonest in pregnancy, predominatly-mitral valve lesions.

Now there is change in trend. CHD> RHD. Booked cases received proper care ,combined approach .(cardiologist/physician ,obstetrician & paediatrician.) Type of lesion & functional reserve of heart (E.F) is important for fetomaternal outcome. Maximum no. of cases delivered vaginally.Poor functional status have incresed maternal mortality,morbidity also poor perinatal outcome.

Every effort must given to preconceptional & postpartum period and a multidisciplinary team approach to carry the pregnancy with cardiac disease to a successful outcome.

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