

Outcome in Rheumatic Heart Disease in Pregnancy



Medical Science

KEYWORDS : Rheumatic heart disease, Pregnancy, cardiac intervention

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ABSTRACT

Aims: to study the outcome of rheumatic heart disease in pregnancy Method and material: 50 women with rheumatic heart disease in pregnancy were enrolled in the study from outdoor patients and ward detailed history was evaluated, analysed patients with NYHA grade 3 and 4 were admitted at first. all the women were given prophylaxis against infective endocarditis. Conclusion: Advance NYHA grade poor outcome but with counselling and explained the patients about their condition and cardiac intervention needed should be done before conception.

Introduction

Rheumatic valvular heart disease in pregnant patients through a grave and serious condition considering the huge number of deliveries in our country every year even with this incidence the actual number of pregnant patients with cardiac disease is quiet high. Most patients NYHA grade 3 and 4. different valvular heart disease managed with medically during pregnancy and sometimes surgically. Patients follow up with 2-d -echo. sometimes complication done if patients not manage with medically then done surgical procedure with expert cardiologist.

The purpose of this study is to evaluate treatment of rheumatic heart disease with different modalities in 50 patients.

Material and method

The study of rheumatic heart disease in pregnancy was carried out in the department of medicine.

50 patients with rheumatic heart disease in pregnancy were enrolled in the study from opd and ward. Patients were analysed with regards to their age, parity, type of cardiac lesion, NYHA status, mode of delivery, complications and maternal and perinatal outcome. Detailed history was elicited regarding of disease, medications, any prophylaxis, anticoagulant drug therapy, cardiac surgery prior to pregnancy and any complications in previous pregnancy. general and systemic examinations was carried out with emphasis on cardiovascular system. Obstetrical examinations was done to know the exact gestational age and accordingly antenatal care and management of pregnancy, labour and puerperium was done. Patients with grade 3 and 4 were admitted at first visit while grade 1 and 2 followed by every 15 days antenatal latest by 36 weeks and allowed to go into spontaneous labour. all the women were given prophylaxis against endocarditis during labour. LSCS was done mostly for obstetric indications. If needed cardiac intervention were done. Fetal and maternal outcome after delivery as well as development of any complication was noted and treated accordingly.

Results

This study carried out in civil hospital. study shows age distributions in 21 to 30 years. Most patients present with breathlessness 52%. NYHA patients with grade 1 and 2 classification more 78%, 3 and 4 with 22%. Patients with multigravida were 74% and primigravida were 26%. Patients admitted on basis of 72% on regular visit and 28% on emergency clinical condition. We found that single valve lesion 25 patients had mitral valve lesion, 6 had aortic valve lesion and 1 patients had tricuspid valve lesion, combined valve involvement 18 patients. Mitral valve was the common single valve involved in my study. Out of 25 patients of single mitral valve involvement was isolated mitral stenosis was found in 14 patients, isolated mitral regurgitation found in 4 patients and both combined in 7 patients. out of 18 patients in whom 2 or more valves involved, 13 patients were involved two valves and 5 patients with 3 valve involvement. During pregnancy mitral valvotomy is safely performed as compared to replacements surgery. One patients had undergone ballon mitral valve surgery during current pregnancy. All patients with mitral valve

replacement and two patients with ballon mitral valve were on anticoagulant therapy through the pregnancy and in post natal period. Patients with rheumatic heart disease 60% had normal vaginal delivery, 22% patients had instrumental vaginal delivery and 18% patients underwent LSCS. in our study 22% patients had developed complications like acute left ventricular failure, atrial fibrillation and congestive cardiac failure. Patients who underwent cardiac surgery only 2 patients developed complications. In 19 patients in whom surgery was indicated but was not done. In grade 1 and 2, 12.82% patients developed complications, while 54.54% patients developed complications in NYHA grade 3 and 4. maternal morbidity and mortality increased with grade 3 and 4.

Our study suggest that number of preterm babies, small for gestational age babies and perinatal mortality increases as NYHA grade increases.

Discussion

My study compare with different study like pratbha et al.

It shows that most patients 80% in age group 21 to 30 years. While in pratibhsa et al it was 95% patients. My study showed that breathlessness was most common reason for patients admission. Our study showed 52%, while 46% patients in hameed et al. Our study showed with grade 1 and grade 2, which is 67%, in Pratibha showed 56%. Our study showed that most patients came with multigravida. It is same in pratibha et al. patients admitted not followed regular interval, that is shown in our study. Our study showed that those patient on cardiac drugs and on anticoagulation prophylaxis, they did not develop complications then those not on drugs, and they were 43.75%. Most patients associated with single valvular involvement, which was 64%. My study showed that if patients operated before pregnancy then patients did not develop complications. We need expert cardiologist. Most patients presented in hospital had normal vaginal delivery. Our study showed that most patients of follow up regularly not showed not develop much complications. Our study showed that cardiac surgery which was done, admitted with complications 47.36% compared to that operated. So if patients who had planning for conception in known case of rheumatic heart disease we should go cardiac surgery. Our studies showed that all perinatal mortality were in the preterm pregnancy and also studies showed that preterm babies, small for gestational age babies and perinatal mortality increases as NYHA grade advanced.

Conclusion

Rheumatic heart disease is most common type of cardiac disease. In our country, mitral valve is the most common valve affected either alone or in combination with other valves. Our findings are in concurrence with the known facts that advance NYHA grade of disease has poor outcome including maternal and perinatal mortality. Cardiac intervention in the form BMV during pregnancy with minimal risk and high success rate has changed the scenario.

TABLE-1 AGE DISTRIBUTION

AGE IN YEAR	NO.OF CASES	PERCENTAGE	D.PRATIBHA ET AL
BELOW 20	7	14%	2%
21 TO 30	40	80%	95%
ABOVE 30	3	6%	3%

TABLE -2 SYMPTOMS DISTRIBUTION

SYMPTOM	NO.OF CASES	PERCENTAGE	HAMEED ET AL
BREATHLESSNESS	26	52%	46%
EDEMA	8	16%	20%
PALPITATION	7	14%	12%
FEVER	3	6%	8%
COUGH	2	4%	6%
GABHARAMAN	2	4%	2%

TABLE .3 NYHA GRADING

NYHA GRADING	NO	PERCENTAGE	TOTAL	D.PRATIBHA ET AL
1	25	50%	78%	72%
2	14	28%		
3	7	14%	22%	28%
4	4	8%		

TABLE 4

FOLLOW UP OR EMERGENCY	NO	COMPLICATIONS
FOLLOW UP	36[72%]	5[13.88%]
EMERGENCY	14[28%]	6[35.71%]

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