

HEART DISEASE COMPLICATING PREGNANCY 8 YEAR STUDY

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SUMMARY

167 cases of Heart Disease Complicating Pregnancy were seen during the Eight Year Period (i.e.) from 1987 to 1994. Rheumatic Heart Disease is still the major cause. Increasing number of cases of congenital heart diseases are now becoming pregnant and going through pregnancy safely. There is also an increased number of post-valvotomy cases, becoming pregnant and going through pregnancy safely.

INCIDENCE OF HEART DISEASE

During the 8 years period from 1987-1994 there were 167 cases of Heart Disease with Pregnancy, the incidence being 0.15%. The reported incidence of Heart disease with pregnancy is 0.2 to 3.6%. The incidence at our hospital is low as compared to that reported by other authors as shown in Table I. This may be due to some cases being shifted to the cardiology unit for further management and being lost to follow up.

RESULTS AND DISCUSSION

Age and Parity :

The prevalence of Heart Disease was highest in the age group of 15-30 years. The maximum number were seen between 21-25 years (46.7%) as shown in Table II. It correlates with the published reports of others. Paritywise occurrence is shown in Table III. Any particular parity does not appear to have any relevance to Heart Disease. The patients in this study were equally distributed between urban areas and rural and urban slums.

Table I
Incidence of heart disease

PintoRosario & Kuthalia	(1975)	0.46%
Deshmukh M. A. et al.	(1978)	0.55%
Anjaneyulu	(1976)	0.34%
Govt. Maternity Hospital	(1977 & 78)	0.43%
Jose P. Noronha & Lilly Jacob	(1985)	0.56%
Present series		0.15%

Table - II
Distribution of cases according to age

15 - 20 Years	39	23.3%
21 - 25 Years	78	46.7%
26 - 30 Years	34	20.4%
31 - 35 Years	13	7.8%
36 Years and above	3	1.8%

Table - III
Distribution according to parity

Primi	46	27.5%
Gr II	48	28.7%
GR III	34	20.4%
GR IV	17	10.2%
GR V	13	7.8%
GR VI & Above	9	5.4%

Type of Heart disease :

Rheumatic heart disease is still the major cause of heart disease in pregnancy as shown in Table IV. The incidence of Rheumatic Heart Disease shows a decreasing trend over the last 2 decades. Among the cases of rheumatic heart disease, 65% were due to mitral stenosis and 23% due to mitral stenosis with regurgitation (Table V).

Congenital heart disease :

PDA is the major etiological factor. Except for 2 patients who were 2nd gravidae, the rest of them were primigravidae diagnosed for the first time during this pregnancy. Out of the 7 cases, 5 had full term normal delivery. One ended in a preterm labour and one patient underwent an MTP prior to surgery.

Table - IV
Comparison with other author's incidence

	Rheumatic	Congenital	Others
Present series (87-94)	86.8%	10.8%	2.4% (cardiomyopathy)
Narmada & Sorab'85	86.54%	11.54%	1.92%
Dumir & Sathe'85	96%	4%	.

Table - V
Distribution according to lesion rheumatic heart disease

Mitral Stenosis	95	65%
Mitral Stenosis + Mitral Incompetence	33	23%
Mitral Incompetence	5	4.2%
Mitral Stenosis + Mitral Incompetence + Tricuspid Regurgitation	3	2%
Mitral Stenosis + Aortic Regurgitation	3	2%
Mitral Stenosis + Tricuspid Regurgitation	1	0.76%
Tricuspid Regurgitation	1	0.76%
Aortic Stenosis	1	0.76%
Mitral Stenosis + Mitral Regurgitation + Aortic Regurgitation + Aortic Stenosis	2	1.4%

Four cases of ASD had full term normal deliveries. Of the 3 cases of VSD, 1 had a term delivery, 1 case presented with a Rupture Uterus and 1 had a preterm delivery. In one case of Eisenmenger complex.

Pregnancy was terminated with Emcredyl instillation. Another case of Tetralogy of Fallot in a 3rd gravida who had one preterm delivery and one MTP, The current pregnancy ended in an intra uterine foetal death

at 22 weeks.

Of the 4 cases of Cardiomyopathies, 3 cases had postpartum cardiomyopathies and one was diagnosed as Constrictive cardiomyopathy in the Antenatal period. There were 2 cases of primary pulmonary hypertension, one was diagnosed during the 4th pregnancy and had a term delivery. Another one, a primigravida had a premature delivery and expired immediately. About 60% of the cases were admitted as emergencies and 40% were admitted through the antenatal clinic. Of these, 63% of the cases were well compensated and 35.5% Grade III & IV failure.

There were 11 cases of post mitral valvotomy. 7 cases showed no signs of restenosis. Pregnancy occurred from 2 to 14 years after valvotomy. Restenosis was seen in 3 cases within 3 to 14 years after valvotomy. In one case the patient underwent Antenatal Valvotomy at 32 weeks of gestation.

Echo Cardiogram has helped in some cases to rule out heart disease and to assess the functional capacity of the heart and severity of the disease.

Almost 25% of the patients were asymptomatic. The duration of labour was between 4-10 hours. In this study 58.5% had normal delivery and 14.5% were delivered by an outlet forceps. Caesarian section was required in 11.5% of cases and 15.4% were discharged undelivered. About 42.5% delivered at full term and 30% had premature delivery. Fifteen cases under-

went sterilisation in the post partum period. The day of operation varied from 3 days to 1 month after delivery.

MATERNAL MORTALITY

Four deaths occurred among 167 cases giving an incidence of 2.4% amongst all emergency admissions. One case of Primary pulmonary hypertension died immediately after delivery, 3 cases of Rheumatic Heart Diseases died.

CONCLUSIONS

Rheumatic Heart Disease is still a major cause of Heart Disease. Cardiomyopathy is increasingly recognised which may present as cardiac failure in the last month of pregnancy or puerperium. With good supervision it should be possible for the patient to emerge out from child birth without much degradation in her cardiac condition. Good Antenatal care with early detection of early lesions is important to prevent complications. The team work of cardiologists and obstetricians will go a long way in decreasing maternal mortality.

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