

## ANTENATAL STILLBIRTHS

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### SUMMARY

The occurrence of foetal death is one of the tragedies that confronts the physician providing obstetric care. The importance of determining the causes of foetal death cannot be overemphasized as only when the cause is known can the patient be counselled about chances of recurrence and attempts at prevention of treatment initiated. Also only with systemic reviews of perinatal mortality (foetal and neonatal) a significant reduction in the mortality rate can be expected. With this objective in mind, the following study was carried out to especially analyse the causative factors, methods of prevention and finally modes of delivery in cases of antenatal stillbirths.

### Introduction

In planning strategies to reduce the perinatal mortality in any given population group there comes a point where prevention of many high risk factors plays an important role. With available biophysical monitoring facilities like ultrasonography and foetal monitor supplemented by a close and intelligent vigil throughout the process of labour, the intrapartum stillbirths contributing to the perinatal mortality can be brought down to an irreducible minimum. Also with available neonatal care and updated neonatal facilities, the preventable causes of neonatal morbidity and mortality can be minimized. However, there remains an important

group, the antenatal stillbirths wherein a lot more still remains to be achieved.

Thus with the objective in mind of probably understanding and managing this important group a little better, an analysis of antenatal stillbirths during a period of one year was carried out.

### Material and Methods

The present study was a retrospective analysis of stillbirths occurring during the antenatal period (Macerated Stillbirths) at our hospital during a period of one year. The main objective of this study was to analyse in detail the causative factors responsible for macerated stillbirths with due emphasis on the preventability or non-preventability of each causative factor. Since appropriate obstetric antenatal care goes a long way in prevention of these stillbirths, the antenatal

profiles of these patients were analysed in detail. Expedient delivery is crucial for the psychological management of a patient with IUD and so the various modes of termination of pregnancy in these patients were finally analysed.

### Results

TABLE - I

Fetal Deaths	No. of Patients	%
Antepartum Stillbirths	106	21.8
Intrapartum Stillbirths	150	30.9
Neonatal Deaths	230	47.3
Total no. of Perinatal Deaths	486	

As seen in the above table, out of a total of 486 perinatal deaths, the antenatal deaths totalled upto 106 giving a percentage of 21.8.

Analysing the antenatal practises it was noted that the majority of patients who ultimately had a stillbirth registered in the late second and third trimester (63%). This coupled with fewer antenatal visits (<3 in 56%) could have probably resulted in this unfortunate outcome in spite of the fact that 72.6% of patients were registered patients.

TABLE - II  
ANTENATAL PROFILE

Registered	72.6%
Unregistered	27.4%

Time	Time of Registration in ANC		No. of AN visits		
	No. of Pts.	%	Number	No. of Pts.	%
First Trimester	14	13.2	< 3	60	56.6
Early Second Trimester	15	14.1	3-5	32	30.2
Late Second Trimester	52	49.1	> 5	14	13.2
Third Trimester	25	23.6			

It was seen (Table III) that 45% of the stillbirths occurred at a point of time in pregnancy (>32 weeks) where with available neonatal care, fetal salvage could have been a distinct possibility especially in fetuses greater than 36 weeks of gestation.

TABLE - III  
GESTATIONAL AGE AT WHICH IUFD OCCURRED

Weeks of Gestation	No. of Patients	%
28 - 32	58	54.7
33 - 36	19	17.9
> 36	29	27.4

TABLE - IV  
CAUSATIVE FACTORS

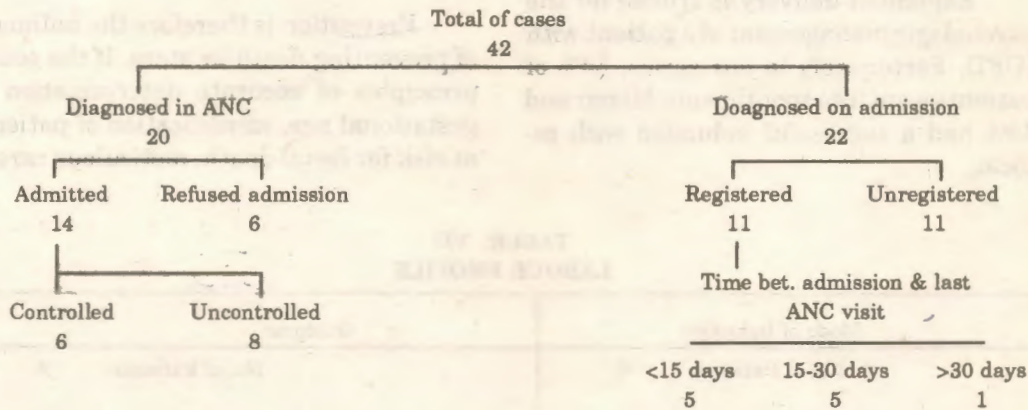
Causes	No. of Patients	%
Pregnancy induced hypertension	42	39.7
Placenta and cord complications	10	9.4
Medical disorders complicating pregnancy	8	7.5
Post datism	5	4.7
Rh isoimmunisation	4	3.8
Miscellaneous	37	34.9



As seen in this table, greater than one third of patients with established stillbirths had pregnancy induced hypertension, a group whereby prevention of this unfortunate outcome is a definite possibility. On the other hand in almost one third of patients no definitive causative factor could be identified.

As PIH contributed to 40% of the antenatal stillbirths we decided to analyse this group in detail. Value of hospitalisation in cases of toxæmia needs no emphasis as proved by the fact that perinatal mortality in patients admitted at the Parkland Memorial high risk unit was 0.9% as compared to 13% in patients who

**TABLE - V**  
**DETAILED ANALYSIS OF PATIENTS WITH IUFD (PIH CASES)**



**TABLE - VI**  
**OTHER CAUSATIVE FACTORS**

Causes	No. of patients	Preventability P/PP/NP
1. Medical disorders complicating pregnancy	8	
Diabetes	1	P
VDRL positive	5	P
Severe anaemia	2	PP
2. Post Datism	5	P
3. Rh isoimmunisation	4	PP
4. Miscellaneous	37	
Congenital Anomalies	5	NP
Recurrent Stillbirths	7	PP
Multiple etiologic factors	5	PP
Severe IUGR	4	PP
Unknown causes	16	PP

P - Preventable PP - Probably Preventable NP - Not Preventable

were discharged from the hospital for various reasons. In the 8 patients in whom PIH was not controlled more proper medical management and timely and aggressive intervention would probably have resulted in a favourable outcome. The importance of registration and hospitalisation should be emphasized. The ability to predict the probability of occurrence of PIH would also be of immense value in early identification of PIH cases.

Expedient delivery is crucial for the psychologic management of a patient with IUGR. Fortunately in our series, 54% of patients went into spontaneous labour and 39% had a successful induction with pitocin.

processes and their treatment.

### Conclusion

In conclusion we quote, "The stillbirth of a baby awaited with joy is a bitter calamity. Intrapartum death is saddening to everybody concerned; worse death in utero can be extremely chilling and repugnant". This statement – an anonymous editorial of the Lancet, entitled, "Abhorrence of Stillbirths", is quite descriptive.

Prevention is therefore the hallmark of preventing death in utero. If the sound principles of accurate determination of gestational age, identification of patients at risk for foetal death, meticulous care of

TABLE - VII  
LABOUR PROFILE

Mode of Induction		Outcome			
No. of Patients	%	No. of Patients	%		
Pitocin	41	38.7	Vaginal del.	88	83.0
Buctocin	2	1.9	Assisted		
Carboprost	6	5.6	Breech del.	17	16.1
Spontaneous	57	53.8	L.S.C.S.	1	0.9
			(prev. LSCS with failed induction with imminent rupture)		

As seen from the above study it is clear that minimum fetal mortality has not been achieved. Potentially salvagable fetuses still die from the effects of PIH, IUGR, and post maturity. Widespread application of current knowledge and techniques would save some of these fetuses. Others will be saved only with an increased understanding of pathological

associated medical conditions and careful attention to progress of pregnancy is done, a lot can be achieved.

### Acknowledgement

We would like to thank the Dean of Nowrosjee Wadia Maternity Hospital, Dr. S.N. Daftary for granting permission to publish hospital data.