

ABRUPTIO PLACENTAE

(A Study of 105 Cases)

by

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Abruptio placenta is associated with a high maternal and perinatal mortality and morbidity. The exact aetiology of this condition is yet not clear. We have studied these cases for the maternal and foetal outcome in this condition.

Material and Methods

This is a study of 105 cases of abruptio placenta encountered at Lokmanya Tilak Municipal General Hospital and College, Sion, Bombay. Over the last 4 years from 1975 to 1978. Severity of the condition was correlated with the different maternal and foetal parameters. Among these 105 cases, 30 (28.5%) were emergency admissions, 60 (57%) were transferred to our hospital, only 12 (11%) were booked cases and 3 were brought by our flying squad. Patients having less bleeding, minimum other signs and requiring no blood transfusion were grouped as mild. Those having retroplacental clots more than 500 gms and requiring more than 2 units of blood were grouped as severe. Most of them had the typical signs of

abruptio placenta. Cases in between these two groups were grouped as moderate. Most of the mild cases had revealed type of haemorrhage.

Results

During these 4 years there were 23,491 confinements, including 17,491 normal deliveries, giving an incidence of 1:223. The condition was more common in multiparas, only 14% of the cases were primis. Maximum number of cases were in the age group of 21-30 years. Pre-clampsia was encountered in 49 cases (46%), severe pre-eclampsia with BP more than 160/100 and +++ albumin was present in 18% of these 49 cases. Severe degree of abruptio was encountered in 20% of non-toxaemia cases.

Table I shows the foetal survival in relation to the severity of the condition. Preterm women with mild degree of abruptio placenta were treated conservatively. All these 13 women delivered uneventfully at a later date. Although overall stillbirth rate was 55%, foetal loss was 100% in moderate and severe cases. Pitocin 2-5 units after rupturing the membrane was given in drip to 51 women. Prematurity (baby weight 2 kg.) was encountered in 32% of the cases.

Table II shows that severe anaemia was

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TABLE I
Abruptio Placenta: Pregnancy out come

Abruptio Placentae	Live births	Still births	Undelivered
Mild	35 (66%)	5 (9.4%)	13 (24.6%)
Moderate	0	32 (100%)	—
Severe	—	20 (100%)	—
Total 105	35 (33.3%)	57 (55.3%)	13 (12.4%)

TABLE II
Abruptio Placenta: Hb.

Abruptio Placentae	Hb in gms.			
	4 - 6	6 - 8	8 - 10	More than 10
Mild	—	—	32 (60.3%)	21 (39.6%)
Moderate	2 (6.3)	18 (56.2%)	10 (31.2%)	2 (6.3%)
Severe	6 (30%)	8 (40%)	6 (30%)	—
Total—105	8 (7.6%)	26 (24.7%)	48 (45.7%)	23 (22%)

encountered in moderate and severe cases. In this group, 70% of the cases had haemoglobin below 8 gms%.

In this series, 78 women (73%) delivered within 12 hours. Retro-placental clots were encountered in 40 women. (43%) Clots weighing more than 500 gms were passed by 20 (21%) women. Multiple blood transfusions were required in this group and 2 patients developed coagulopathy. Few clots weighing less than 100 gms were not weighed.

Table III shows the amount blood used for transfusion, Table IV shows the associated conditions encountered, Massive

TABLE IV
Abruptio Placenta: Associated Conditions

Complications	No. of cases
Operative delivery	
(a) Forceps	1
(b) L.S.C.S.	2
(c) Caesarean hysterectomy	1
PPH	16 (15.2%)
DIC	5 (4.7%)
Renal Failure	2 (1.9%)
Haemorrhagic shock	2
Deaths	4 (3.8%)
Total	33

blood transfusion (>5 units) were required for 9 patients and most of these were

TABLE III
Abruptio Placenta: Blood Transfusion

Number of bottles of blood transfusion	Number of cases			
	Mild	Moderate	Severe	Total
No transfusion	53	—	—	53
1 - 2	—	27	—	27 (25.7%)
3 - 4	—	5	11	16
5 - 6	—	—	6	6
More than 6 bottles	—	—	—3	3

cases of DIC. Dic was encountered in 5 women (4.7%). Two of them were lost. Post partum haemorrhage was the commonest complication. One of the 2 women with renal failure could not be saved. Total maternal mortality rate was 3.8%. Haemorrhagic shock was the cause of death in 1 patient. Caesarean section was done in 2 cases, because they were not responding to the pitocin drip. Forceps was applied in 1 case for foetal distress.

Discussion

The incidence of abruptio placenta varies from 0.86% (Ashar and Purandare 1968) to 1.16% (Hibbard and Jeff Caate 1966). More severe types (mixed and concealed) of accidental haemorrhage was encountered in 70% of Menon's 1969 series. Prompt delivery, liberal blood transfusions and careful observation are the main factors in reducing the maternal mortality in abruptio placenta. DIC and renal failure are more common if the haemorrhage to delivery interval exceeds more than 8-10 hours (Menon 1969) Maternal Mortality rate given by other workers are 1.6% by Ashar and Purandare (1966), 0.52% by Blair (1973), 2.8% by Menon (1969). Our high maternal mortality rate must be because of the transferred cases who came late to the hospital. In Menon's (1969) series, renal failure and congalation failure of varying grades were met with in 5.5 and 15 per cent respectively. PPH and renal faiture was encountered in 4.2% and 2% of Ashar and Purandare's (1966) cases.

The incidence of abruptio placenta in women having pre-eclampsia quoted by Hibbard and Jeffeate (1966) was 1.2%

and it was 2.02% in patients of essential hypertention. The incidence of pre-eclampsia and hypertention in abruptio placenta was 40% in Ashar and Purandare's (1966) series.

Incidence of hysterectomy was 0.3% in Menon's (1966) series of 1081 cases and caesarean rate was 3%. Two women underwent hysterectomy in this series. One for postpartum haemorrhage following caeserean section and the other for failure to repond to the pitocin drip—(Mixed and cancealed).

Summary

(1) Incidence of abruptio placenta was 1:223 (0.44) Abruptio placenta (105 patients) was associated with a maternal mortality rate of 3.8% and stillbirth rate of 55%.

(2) DIC was encountered in 5 patients (4%) and Renal failure in 2 women.

(3) PPH was the commonest complication encountered in 15%.

(4) Massive blood transfusion was required in 8% cases.

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