

FACTORS AFFECTING PERINATAL OUTCOME IN ANTEPARTUM HAEMORRHAGE

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SUMMARY

A review of 1,70,873 deliveries over a 20 year period 1968-87 revealed that 884 cases of abruptio placentae and 760 cases of placenta praevia were encountered during the period. In the last 20 years, the incidence of emergency cases of abruptio placentae dropped from 52.4% to 25.3% and in the corresponding period, emergency admissions for placenta praevia dropped from 46.2% to 14.8%. Apart from expectant management and more liberal use of blood transfusions it was observed that caesarean section has been used more liberally so that the incidence of caesarean section for placenta praevia increased from 54.2% to 82.4% and that for abruptio placentae from 3.3% to 36.8%. The perinatal mortality for placenta praevia was lowered from 23.9% to 10.1%, but the perinatal mortality for abruptio placentae was not significantly altered.

Introduction

The management of antepartum haemorrhage has been standardised in the last three decades. Whereas the incidence of abruptio placentae has diminished to some extent, the incidence of placenta praevia continues to remain the same, as a matter of fact wide application of ultrasonography scanning brings to light many otherwise asymptomatic cases. The present study analyses cases of antepartum haemorrhage treated at the Nowrosjee Wadia Maternity Hospital and analyses factors affecting perinatal outcome.

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Materials and Methods

In the 20 year period 1967-1987, 1,70,837 deliveries occurred at Nowrosjee Wadia Maternity Hospital. During the same period of time, 884 cases of abruptio placentae were encountered and 768 cases of placenta praevia were treated in the hospital. The perinatal loss in the cases of abruptio placentae was 414 and in cases of placenta praevia was 141 respectively. These perinatal deaths have been analysed in light of their booking status, maternal parity, gestational maturity and management modalities. The details of this analysis are presented herewith:

Incidence of Antepartum Haemorrhage : An analysis of data of 20 years at 5

yearly intervals reveals that the incidence of antepartum haemorrhage has continued to be in the range of 0.85% to 1.20%. A detail analysis reveals that whereas the incidence of abruptio placentae has dropped from 0.70% to 0.40%, the incidence of placenta praevia has continued to be in the range of 0.40% to 0.50%. In the last 20 years, the incidence of emergency deliveries has been dropping, which may be responsible for the declining incidence of abruptio placentae.

Booking status : Analysis of our case records is shown in Table I below.

TABLE - I
BOOKING STATUS OF PATIENTS (%)

Years	Placenta Praevia		Abruptio Placentae	
	Booked	Emergency	Booked	Emergency
1968-72	43.8	46.2	47.6	52.4
1973-77	56.7	43.3	58.5	41.5
1978-82	72.5	27.4	60.9	39.1
1983-87	85.2	14.8	74.7	25.3

It will be seen from the above table that more and more cases have received antenatal care and emergency admissions of all varieties of antepartum haemorrhage have declined dramatically over the years.

Parity: Whereas primiparae accounted for 13.5% of all patients of placenta praevia during the five year period 1968-72, their figure had risen to 27.5% in the last five years. During the same period of time whereas 16.3% of cases of abruptio placentae were primigravidas, the number had risen to 32.6% in the last five years. This change in incidence is related to a wider acceptance of the small family norm.

Gestation maturity: In our country, foetal salvage improves dramatically when

36 weeks of gestation have been achieved. In the present study, the number of cases of placenta praevia that could be conserved with expectant line of treatment to achieve a gestational maturity of 36 weeks and over, rose from 60.9% during the five year period 1968-72 to 75.1% during the period 1983-87. This factor alone shows the importance of energetic expectant therapy in management of placenta praevia. During the same period of time the incidence of patients of accidental haemorrhage delivered with a gestational maturity of 36 weeks and over rose from

50.7% to 56.3%, emphasising the fact that this condition requires prompt treatment, and except in mild cases procrastination is not recommended.

Management Modalities : The sheet anchor of treatment in cases of antepartum haemorrhage is resuscitation, expectant treatment in selected cases of placenta praevia and finally, the decision to terminate the pregnancy with amniotomy and pitocin induction in selected cases or a timely caesarean section depending on the maternal and foetal conditions prevailing at that time. In the present study it was observed that the incidence of caesarean section in the management of both varieties of antepartum haemorrhage progressively increased more so in placenta praevia as shown in the following table.

TABLE - II
CAESAREAN SECTION IN THE MANAGEMENT OF ANTEPARTUM HAEMORRHAGE

Years	Placenta Praevia				Abruptio Placentae			
	C. Section		Vag. Delivery		C. Section		Vag. Delivery	
	No.	%	No.	%	No.	%	No.	%
1968-72	136	54.2	89	45.8	10	3.3	297	96.7
1973-77	77	65.2	41	34.7	14	7.2	181	92.8
1978-82	137	80.9	34	19.8	44	22.9	148	77.1
1983-87	188	82.4	40	17.5	70	36.8	120	63.2

It will be seen from the above table that caesarean section has been employed increasingly so that it accounts for over 80% of the deliveries in present times. Caesarean section helps to lower the maternal morbidity and improve foetal salvage in cases of placenta praevia. However it has been observed that even in cases of abruptio placentae a timely caesarean section goes a long way in reducing maternal morbidity and to save a foetal life which would have been lost during the course of a lengthy ensuing labour. The incidence of caesarean section compared with that of other workers shows that this range varies from over 40% to 80%, of

placenta praevia. However, obstetricians still reserve caesarean section as the modality of treatment of abruptio placentae very selectively and the present rate of caesarean section for abruptio placentae varies between 15% to 25%. A comparison showing a rising incidence of caesarean section in the management of antepartum haemorrhage as quoted by different authors is detailed in Table III.

Perinatal mortality: The perinatal mortality in cases of antepartum haemorrhage studied at five yearly intervals over a 20 year period is shown in detail in Table IV.

TABLE - III
PERCENTAGE INCIDENCE OF CAESAREAN SECTION IN APH

Author	Placenta praevia	Abruptio placentae
Menon (1963)	55.3%	—
Gun (1964)	43.4%	—
Ashar & Purandare (1968)	—	0.5%
Macafee (1962)	63.4%	—
	(33-36 weeks)	—
	75.7%	—
	(36 + weeks)	—
Hibbard & Jeffcoate (1966)	—	8.6%
Blaire (1973)	—	16.4%
B. Das (1951-60)	28.0%	1.6%
(1961-70)	45.0%	5.7%
Mondal, Bhattacharya & Dey (1979)	89.18%	24.07%
NWMH (Present series) (1968-87)	70.66%	24.07%

TABLE - IV
PERINATAL MORTALITY IN ANTEPARTUM HAEMORRHAGE

Years	Placenta Praevia		Abruptio Placentae	
	No.	PNMR	No.	PNMR
1968-72	60	23.9	133	43.3
1973-77	30	16.1	84	43.6
1978-82	28	16.4	94	48.9
1983-87	23	10.1	103	54.2

The above table clearly brings out that the perinatal mortality in cases of abruptio placentae has not materially altered. However with better antenatal care and strict supervision of pregnancy, the incidence of abruptio placentae can be reduced as seen in the present study where it dropped from 0.7% to 0.4% in the last two decades. In cases of placenta praevia modern management has more than halved the perinatal mortality rate. At the Nowrosjee Wadia Maternity Hospital, the average perinatal mortality in placenta praevia in the last two decades has come down to 16.62% and in abruptio placentae to 47.5%. This data is compared with figures reported by other authors in Table V. All authors are in arrangement that abruptio placentae still continues to claim a

heavy toll of perinatal loss whereas modern management has lowered the perinatal mortality in placenta praevia.

Conclusion

In conclusion, the present study reveals that good antenatal care can help to lower the incidence and severity of abruptio placentae and the maternal morbidity in cases of placenta praevia. With a change in social attitudes, more primigravidas with antepartum haemorrhage will test the skills of obstetricians. Wider acceptance of expectant line of treatment, meticulous attention to correction of anaemia, the use of present day aids like ultrasonography to decide about the time for intervention and the more liberal use of caesarean section in well equipped hospi-

TABLE - V
PERINATAL MORTALITY IN APH

Author	Placenta Praevia	Abruptio placentae
Macafee (1952-60)	11.5%	—
Gun (1964)	32.7%	—
Ashar & Purandare (1968)	—	87.8%
Menon (1954-61)	35.3%	—
Hibbard & Jeffcoate (1952-64)	—	50.0%
Blaire (1959-65)	—	55.0%
B. Das (1951-60)	34.8%	41.2%
(1961-70)	33.9%	51.0%
Mondal, Bhattacharya & Day (1979)	32.52%	60.91%
NWMH Present series (1968-87)	16.62%	47.5%

tals with availability of blood transfusion services will help to lower the perinatal morbidity and mortality. In many perinatal centres improved supportive neonatal care services have further helped in improving perinatal salvage.

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