

NEONATAL STATUS AT CAESAREAN SECTION DONE FOR FOETAL DISTRESS

By

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SUMMARY

During one year period from January 1986 to December '86, 96 LSCS were done for foetal distress out of 318 Caesarean Sections. The evidence of foetal distress was meconium stained liquor and/or changes in foetal heart as detected by auscultation. Out of these, the Apgar score at 1 min. after birth was 9 to 10 in 50 cases and 6-8 in 74 cases, whilst in 12 cases it was less than 5.

It appears that when the duration of abnormal F.H.R. and meconium staining of liquor increases, the Apgar score diminishes. If, however, the labour is interfered soon after the evidence of foetal distress the neonatal status remains good. However, these observations do not always reliably predict the neonatal status in majority of cases.

Introduction

Foetal distress is a condition where foetal wellbeing is in jeopardy. Early intervention by terminating pregnancy or labour, reduced neonatal morbidity and mortality. No sophisticated facilities, are available to diagnose foetal distress at this Institution. Hence clinical evidence of foetal distress i.e., F.H.R. irregularity, presence of meconium and excess of foetal movements remain as the criteria. Neonatal status is judged by Apgar score at birth, at 1 min and at 5 mins. This is a relatively crude method of assessment of judging from further development of the neonate.

Material and Methods

Ninety six cases of C.S. done for foetal distress were studied at Cama & Albless

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Hospitals, Bombay from January 1986 to December 1986. Details regarding previous obstetrics carrier and complications of pregnancy as regards Pre-eclampsia, Hypertension, Anaemia, Postdatism were noted. In all postdated pregnancies and high risk pregnancies, NST was done. When patient developed foetal distress, duration of distress was calculated from the time of its detection to the birth of the baby. Neonatal apgar score at birth, at 1 min and 5 mins, were noted to see the effect of duration of F.D. on neonate.

Observations

1. Rate of C.S. done for F.D. at our hospital is 7.9% (i.e. 96 out of 318 C.S.).
2. Antenatal foetal distress was detected in 12.5% by non reactive NST in postdated pregnancies and high risk pregnancies.

<i>Antenatal</i>		<i>Intranatal</i>	
Elderly Primigravida	— 3	Prolonged I stage	— 13
Ess. Hypertension	— 12	Prolonged II stage	— 11
Pre-eclampsia	— 9	Tight cord round the neck	— 2
Postdatism 7-14 days	— 10	Cervical dystocia	— 1
more than 15 days	— 10		
Eclampsia	— 2	Cord prolapse	— 1
Previous SB ? cause	— 5	Persistent occ. post	— 6
Accidental Haemorrhage	— 2	C.P.D.	— 14

3. Intranatal F.D. was detected in 87.5% by clinical parameters.

4. Following predisposing factors contributed to F.D.

5. Out of 96 cases of C.S., 77% pregnancies were at term, 20.8% were postdated more than 41 weeks and 2 were preterm less than 36 weeks.

6. Apgar score of the neonates at birth was as follows:

Apgar score is observed to be lesser when the liquor is meconium stained, out of 6 perinatal deaths in 4 cases, FHR irregularly was recorded along with meconium staining of liquor.

Good Apgar score at birth inspite of clinical evidence of foetal distress during labour suggest that early interference ensures a good neonatal outcome.

Apgar Score

Duration of F.D.	5 and less	6-8	9-10
Less than 2 hours	6	8	32
2-3 hours	3	7	13
3-4 hours	1	4	4
4-5 hours	1	1	1
5 hours and more	1	1	Nil
Total	5	24	50

There were 5 neonatal deaths and one fresh still birth.

7. In all postdated pregnancies NST was done. 7 of them had nonreactive NST out of which 2 babies were lost.

8. NST was also done in women with high risk pregnancies and those with a bad obstetric history. It was nonreactive in 5 women. Babies of these mothers did well.

9. Analysis of clinical parameters of cases of Foetal distress was as follows:

Discussion

It usually takes 2-4 hours of hypoxic state for the development of neurological damage in the absence of cord compression (either cord prolapse or tight loop of cord round the neck).

In a similar study done by Dr. Nagen Roy Chaudhary *et al* (in 1965), Perinatal mortality measured with duration of F.D. was 7.8% in 1-4 hrs., 10.3% in 4-8 hrs., and 14.2% in 8-12 hrs. They also observed that PMR was minimum when C.S. is

F.H.R. Pattern	Apgar Score					
	0	1-5	6-8	9-10	Total	
120-160 Regular	Clear liquor	—	Nil	2	1	3
	Meconium stained	1	2	10	18	31
120-160 Irregular	Clear	—	1	1	11	13
	Meconium stained	—	1	6	2	9
160 and more Reg./Irreg.	Clear	—	1	1	6	8
	Meconium stained	—	2	4	9	14
120 and less Reg./Irreg.	Clear	—	2	5	5	12
	Meconium stained	—	1	4	Nil	5

done for F.D. (6.5%) 32.4% when mid-cavity forceps are applied, 7.2% when outlet forceps were applied and 9.6% when neonate delivered normally.

Conclusion

In the absence of sophisticated intranatal monitoring facilities for F.D., clinical parameters suggestive of foetal distress are the only guidelines for interference.

It is possible that some unnecessary caesarean sections have been done in this series, as neonatal biochemistry has not been done to confirm the foetal biochemical changes. However, in the absence of such facilities, there are no other guidelines at present.

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