

OBSTRUCTED LABOUR—A REVIEW OF 307 CASES

by

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Obstructed labour still remains a frequent obstetric problem in the developing countries, like India and carries a high mortality in rural mothers. The materials were collected from District Hospital, Jalpaiguri (1965-67) and from the District Hospital, Suri (1968-71), West Bengal. During this period, out of 13,474 confinements there were 307 cases of obstructed labour, giving an incidence of 2.3%.

Analysis

There were 91 (29.6%) primigravidae, 95 (30.9%) grandimultis and 121 (39.5%) having parity 1-4.

Clinical Conditions on Admission

According to the effect of obstruction on mother and foetus the cases were grouped—as mentioned in the Table I.

Obstructed labour having pronounced effect on mother with dead foetus or with

rupture uterus—constituted 55% and 14.9% of cases respectively.

Contracted pelvis and malpresentation were responsible for 63.5% and 32.6% respectively in producing obstruction. Out of 195 cases of contracted pelvis producing obstruction, 75 (38.5%) were mults with previous history of normal delivery.

Methods of Delivery

The cases were dealt with by destructive operation in 51.8%, caesarean section in 19%, forceps in 11.7% and hysterectomy in 15.6%. C.S. was done for 40 in Group A, 16 in Group B and 2 in Group C cases. Exploration of uterus was done as a routine in vaginal delivery and rupture of uterus was detected in 7 (4.4%) out of 159 destructive operations. In these 7 cases hysterectomy was performed in 3, abdominal repair in 2 and 2 were treated conservatively.

TABLE I
Grouping of Cases According to Clinical Conditions

	Group A Minimal effects on mother and foetus	Group B Pronounced effects with living foetus	Group C Pronounced effects with dead foetus	Group D With rupture uterus
No.	72	20	169	46
%	23.7	6.4	55	14.9

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Maternal and Perinatal Deaths

The overall maternal mortality was 11.4%, 20% in Group B, 6.5% in Group C and 41.3% in Group D. Destructive

TABLE II
Factors Producing Obstruction

Causes of obstruction	No. of Cases	%
1. Pelvic contraction and disproportion	195	63.5
2. Malpresentation and malposition	100	32.6
(i) Occipitoposterior	— 18	
(ii) Transverse lie	— 61	
(iii) Face and brow	— 13	
(iv) Others	— 8	
3. Congenital malformation of foetus	5	1.6
4. Pelvic tumours	3	1.0
5. Miscellaneous	4	1.3
	307	100

TABLE III
Methods of Delivery with Corresponding Maternal Deaths

Nature of Delivery	No.		Maternal Deaths	
	No.	%	No.	%
A. Vaginal Delivery	200	65.1	20	10
1. Destructive operations	159	51.8	10	6.3
(a) Craniotomy	119	38.7	8	6.7
(b) Decapitation, evisceration etc.	38	12.4	2	5.3
(c) Others	2	0.7		
2. Forceps	36	11.7		
3. Others	5	1.7		
B. Abdominal Delivery	107	34.9	25	23.3
1. C.S.	58	19	5	8.6
2. Hysterectomy	48	15.6	19	39.6
3. Others	1	0.3	1	100
	307	100	35	11.4

TABLE IV
Maternal and Perinatal Deaths in Different Groups

	Maternal deaths		Perinatal deaths	
	No.	%	No.	%
Group A (72)	0	0	22	30.6
Group B (20)	4	20	14	70
Group C (169)	12	6.5	169	100
Group D (46)	19	41.3	46	100
	307	35	251	81.8

operations had a mortality of 6.3%, caesarean section had a mortality of 8.6% while that in hysterectomy was 39.6% (Table III). The over-all perinatal mortality was 81.8%, 30.6% in Group A and 70% in Group B.

Discussion

In the developing countries like India obstructed labour is still rampant in rural areas. Poor socio-economic condition, ignorance, lack of antenatal care and paucity of intranatal facilities are the factors for its prevalence. As most of these patients are concentrated to the district or sub-divisional hospitals, the incidence is as expectedly, appallingly high.

As all the mothers were exposed to the same adverse environment, the cases were almost equally distributed in primis, mults and grandmults being 29.6%, 39.5% and 30.9% respectively. Contracted pelvis and consequent disproportion were responsible for 63.5% cases. Minor variant of contracted pelvis is still prevalent amongst ill nourished rural primis and secondary contracted pelvis is not infrequently met in mults due to malnutrition, coupled with prolonged lactation. These mults have a false sense of safety due to previous uneventful deliveries. Malpresentation which was responsible for 32.6% cases of obstructed labour and was principally confined to mults and remained undetected till obstruction set in.

Because of late diagnosis and inadequate transport facilities from the place of occurrence to the equipped hospitals, delay, in most of the cases was unavoidable resulting in pronounced effect on the mother and the foetus. Most of the mothers showed signs of dehydration, exhaustion and electrolytic imbalance with development of ketosis. Varying degree of infection was almost always

present. Accompanying malnutrition and anaemia were almost always underestimated and ignored. The incidence of spontaneous rupture in 14.9% cases showed the magnitude of late arrival of the cases.

The primary management is to resuscitate the mother. Destructive operations were done in 51.8% of cases in the present series. This emphasises the need of training and skill of the personnel likely to tackle the situation in their day to day obstetric practice. The frequent reference of Stabler, (1949) advocated caesarean section in preference to destructive operation but in the series of cases reported by Bhowmick (1974), Gogoi (1971), Maclean (1966) and Palanichamy (1975) from India, it is found that destructive operations have to be performed. Exploration of uterus should be mandatory following delivery to detect rupture uterus either preexisting or caused during instrumental delivery and it was detected in 4.4% cases in the present series.

Caesarean Section was done in 19% cases and except in 2, foetal heart sounds were present in all the cases. While there is no controversy in deploying section in sufficiently early cases one should take a cautioned approach in taking decision in late cases of obstructed labour with evidences of all ominous signs just for delivering a live child. A series of complications are likely to be encountered. These are anaesthetic hazards, technical difficulties, haemorrhages, shock, peritonitis, septicaemia, and burst abdomen. There were 16 caesarean sections in these category of patients with 4 maternal deaths and the foetal survival in those 4 maternal deaths was only one. Indeed even by deploying section in 16 out of 20 cases in Group 'B', the perinatal mortality was as high as 70%. One should

think twice before undertaking caesarean section in such advanced neglected cases. Jhirad (1954) also cautioned, went a step further and suggested destructive operations in such late cases with moribund condition of the foetus to get a good result.

In established cases of spontaneous rupture of uterus laparotomy followed by hysterectomy is the rational treatment. In cases of doubt much is probably benefited by laparotomy.

The maternal mortality was 11.4% in the series. Obstructed labour and rupture uterus were leading causes of maternal deaths in rural areas. Das (1969) and Rao (1969) cited a death distribution of 50% and 31.8% respectively in this category. This is one of the condition which is best prevented than to be treated. But so long as the mothers are placed at the mercies of untrained dais one should take a realistic view to get a reasonable gain out of the tragic. Cautious attitude in taking decision for section, skill in techniques of destructive operations and improvement in ancillary facilities can certainly improve the result to a certain extent.

Perinatal mortality was also appallingly high, 81.8% in the present series. The foetal salvage is directly related to the degree of obstruction rather than the methods of delivery employed.

Summary

Analysis of 307 cases of obstructed labour has been presented; only 23.7% cases came early and the rest came late with as many as 14.9% with rupture of uterus. Contracted pelvis and malpresentations were responsible for 63.5% and 32.6% of cases, respectively. 51.8% cases were dealt by destructive operations which emphasises the need of skilled personnels to tackle the situation. Caesarean Section should be employed with caution. Maternal mortality was 11.4% and perinatal mortality was 81.8%

Acknowledgement

We are thankful to D.M.O. Sadar Hospital, Jalpaiguri and Suri Birbhum for their kind permission to utilise the hospital records.

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