# A RETROSPECTIVE STUDY OF OBSTRUCTED LABOUR IN HAZARA DIVISION

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*A very high incidence of obstructed labour in rural areas of our country in general and Hazara division in particular is a matter of great concern for us as obstetrician. Hence we embarked upon this study to evaluate factors leading to this grave complication, to explore the rote of health professionals at different levels in prevention and sometime causation and to rationalise treatment strategies. This retrospective study was performed between Jan 95 to June 98 to analyse the cases of obstructed labour in relation to the causes, presentations, morbidity, mortality and its prevention. There were 100 such cases. Total number of deliveries during this period was 4714 giving an incidence of I in 47 deliveries (2.12%). There were 22 cases of ruptured uterus with 2 maternal deaths and 51 perinatal deaths.*

## INTRODUCTION

obstructed labour is a condition where labour comes to a standstill inspite of good uterine conditions. It is caused by abnormalities of the passages or passenger and sometime due to abnormal uterine contractions. Neglected cases end up with serious maternal and fetal complications including life time morbidity or mortality. It is important to note that obstructed labour may or may not be prolonged.' History of mismanagement by health professional may or may not be there. Membranes rupture early in labour. Patient is usually in distress, dehydrated, and having tachycardia. Uterus is hard usually moulded to the shape of the fetus and tender especially in the lower abdomen. Bindle's ring is there. The fetus is either dead or there will be signs of fetal distress. On vaginal examination, vagina and sometimes vulva is oedematous. Presenting part is either high up with the loosely hanging oedematous cervix or it will be tightly fix at the level of obstruction. There will be extreme moulding and caput formation. If left untreated it may end up with the rupture of the uterus.[3] The patient must be immediately delivered by the safest possible method.

Best treatment is prevention through adequate antenatal care by competent professional. Another important factor is training of all doctors who are involved in obstetric practice.[3]

## PATIENTS AND METHODS

This study was conducted in Gynae B Unit of Women and Children Hospital, which is affiliated with Ayub Medical College, Abbottabad. Criteria for diagnosis was based on history and clinical features.

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Post-operative/post-natal course was critically reviewed in relation to the puerperal morbidity and fetal outcome.

100 consecutive cases of obstructed labour have been retrospectively reviewed between Jan 1995 to June 1998. Total number of deliveries during this period was 4714.

## RESULTS

The results of this study are given in tables 1-5. Incidence of obstructed labour was 1 in 47 i.e. 2.12%. The number of patients in each age group is shown in Table-1. Majority of the patients were in their 3rd decade of life with parity ranging from 1 -4.

**Table-1: Number of Patients in each Age Group**

| Age | No. |
|---|---|
| 16-20 | 7 |
| 21-25 | 23 |
| 26-30 | 33 |
| 31-35 | 20 |
| 36-40 | 13 |
| 40 | 4 |

**Table-2: Distribution of patients according to parity**

| Parity | No. |
|---|---|
| 0 | 24 |
| 1-4 | 48 |
| 5-8 | 20 |
| 8 | 8 |

Majority of the patients presented with various combinations of symptoms which are shown in Table-3. Patients with ruptured uterus are not included in this table.

The causes of obstructed labour seen in the study arc given in table-4. CPD was the leading cause followed by transverse lie.

**Table-3: Mode of Presentation**

| | |
|---|---|
| Labour pains for more than 24 hours. | 21 |
| Dehydration tachycardia. | 20 |
| Loss of fetal movements. | 16 |
| Ruptured membrane for more than 24 hours. | 12 |
| Antepartum haemorrhage (APLI). | 12 |
| Cessation of labour pain. | 8 |
| Fever | 7 |

**Table-4: Causes of Obstructed Labour**

| Causes | No | % |
|---|---|---|
| CPD (Cephalopelvic disproportion) | 35 | 35 |
| **Mal-presentation** | | |
| 1. Transverse lie | 20 | 20 |
| 2. Oblique lie | 1 | 1 |
| 3. Breech (stuck head) | 2 | 2 |
| Face | 2 | 2 |
| **Malposition** | | |
| 1. Persistent occipito posterior | 11 | 11 |
| 2. Deep transverse arrest | 2 | 2 |
| Stuck shoulder | 2 | 2 |
| **Contracted pelvis** | | |
| 1. Without deformity | 10 | 10 |
| 2. Osteo-malacia | 4 | 4 |
| Anterior sacculation of-uterus | 1 | 1 |
| Second degree uterine prolapse with cervical dystocia. | 1 | 1 |
| **Mal formations** | | |
| Anencephalic | 2 | 2 |
| Hydrocephalic | 6 | 6 |
| Hydrops faetalis with marked fetal ascites | 1 | 1 |

63 cases were delivered by caesarean section. 2 of these patients required ligation of afferent vessels to control intra operative haemorrhage - 22 cases required hysterectomy. One craniotomy and 5 encephalocentesis were done. All these patients had vaginal delivery. 4 had forceps deliveries (all outlet forceps). In 5 cases uterus was repaired because the family was not complete and the uterus was healthy.

Fetal mortality' and morbidity is significantly increased in obstructed labour. In our series the findings were as follows. There were 45 still births and 6 early neonatal deaths. 3 babies had injuries i.e.

| | | |
|---|---|---|
| i) | Cephal Hameatoma | 1 |
| ii) | Bruises on face | 1 |
| iii) | Bruises & injury to the prolapsed arm | 1 |
| iv) | Meconium aspiration | 3 |

Maternal morbidity in our series is shown in table-5. Majority of the patients had combination of

symptoms. Surprisingly 20% of the patients had uneventful post-operative course. Keeping in view the risk of frank or potential sepsis all the patients received combination of antibiotic therapy to cover Gram +ve, Gram -ve aerobes and anaerobes. Anaemia was a common feature. 10% patients required blood transfusion.

There were two maternal deaths due to rupture uterus after an obstructed labour. They were brought in gasping condition and we could not revive them inspite of all the efforts. Total no of maternal deaths during this period was 27 i.e. incidence was 7.4% of all the maternal mortalities.

**Table-5: Causes of Maternal Morbidity**

| | |
|---|---|
| Septic shock | 2 |
| DIC | 1 |
| VVF | 3 |
| Burst abdomen | 7 |
| DVT | 1 |
| Bed sore | 1 |
| Chest infection | 3 |
| P.P.H. | |
| 1. Uterine atony | 6 |
| 2. Vaginal lacerations | 3 |
| Puerperal pyrexia | 80 |

usually by intramuscular route in order to expedite delivery. This usually results in uterine rupture. Detailed discussion about the causes of the obstructed labour is beyond the scope of this paper. Only one factor is mentioned i.e. transverse lie, which is equally dangerous with or without hand prolapse. Contrary to belief of some junior doctors and general practitioners who think former to be more significant. It is to be remembered that in case of transverse lie, hand

prolapse does not alter the gravity of the situation. Regarding mode of delivery 63% of our patients were delivered by caesarean section because of the impending rupture of uterus and presence of other contraindication to vaginal deliveries. Craniotomy" has been mentioned as one option but we recommend this procedure only in case of hydrocephalus and never in fetus without this mal-formation. This is because excessive moulding, caput formation makes this procedure extremely dangerous. In our series 22 patients had hysterectomy. We recommend hysterectomy in those cases where a patient has completed her family and where uterus is badly-infected, and friable. In our experience caesarean hysterectomy, even subtotal, is justified in these cases. This leads to better and faster post-operative recovery and specially eliminate the possible risk of PPM. Although correction of Anemia, fluid and electrolyte imbalance is desirable before surgery but the latter can't be postponed for unlimited time. One has to intervene, the earlier the better. Finally, the experience of obstetrician and anaesthetist may be the deciding factor regarding the outcome of the treatment. For better neonatal outcome traumatic vaginal delivery has to be avoided in case fetus is still alive. Good neonatal care is vitally important for survival and future health of the baby.

**CONCLUSION**

Very high incidence of obstructed labour in our community is a reflection of poor quality of obstetric care both in poor urban and rural areas. To deal with this important issue of MCH revolutionary' changes have to be brought in our system. Proper training and accountability at all levels of health professional is important[6] especially for lady doctors.

It is a common observation that lady doctors display their credentials as an obstetrician while in fact they have not even done a house job in the field. It is recommended that every doctor who intends to practice obstetrics must have one-year residential experience in teaching hospital. More over lady general practitioner and lady doctors in public hospitals should be exposed to refresher courses to brush up their knowledge. A doctor may not be able to treat a case of obstructed labour but he/she should be able to predict and prevent it. Recognition and early referral is vital for better outcome.

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