

## A Study on Obstructed Labour: A Two Year Clinical Study

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### Abstract

True CPD is a tenuous diagnosis because two-third or more women diagnose as having this disorder and delivered by caesarian section, subsequently deliver even larger new born vaginally, leading to necrotic trauma to the bladder, leading to stress incontinence and fistulas. All women admitted to the labor room with obstructed labor and its sequelae. On admission detailed history was noted. General examination on admission was made, like stature, anemia, shock, dehydration, jaundice, pedal edema, and bladder - bowel distention. Vital signs like respiratory rate, pulse rate, temperature and blood pressures were noted. In our study, 4% delivered vaginally of which 2% delivered by forceps and 56% by cesarean section and 40% underwent laprotomy. A study by Konje et al shows 82% emergency caesarian section, 12% of the mothers had normal fetal cardiac activity, 44% had non - recurring pattern and in 44% fetal cardiac activity was absent.

power, the passenger and the passage. Today, expressions such as cephalo-pelvic disproportion and failure to progress often are used to describe ineffective labour. The expression such as cephalo-pelvic disproportion came into use prior to the 20<sup>th</sup> century to describe obstructed labor resulting from disparity between the dimensions of the fetal head and maternal pelvis. True disproportions are now rare and most disproportions are the result of mal-proportions of fetal head within the pelvis (asynclitism) or of ineffective uterine contractions. Obstructed labour is a major cause for both maternal and newborn morbidity and mortality.

True CPD is a tenuous diagnosis because two-third or more women diagnose as having this disorder and delivered by caesarian section, subsequently deliver even larger new born vaginally, leading to necrotic trauma to the bladder, leading to stress incontinence and fistulas.

### *Aims and Objectives*

To study prevention and cause of obstructed labor and its sequelae.

To study fetal outcome.

### Material and Methods

A two year prospective study was done from 01-05-2014 to 30-04-2016 at Basaveshwar Teaching and General Hospital (BTGH). Out of a total of 11655 deliveries, 81 cases were diagnosed and admitted as obstructed labour, of which one patient was lost for follow-up even before delivery.

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Received on 08.08.2017  
Accepted on 30.08.2017

**Keywords:** Obstructed Labour;  
CPD; Complications.

### Introduction

The ability of the fetus to negotiate the pelvis during labor and delivery is dependent on the complex interaction of three variables, the

All women admitted to the labor room with obstructed labor and its sequelae. On admission detailed history was noted. General examination on admission was made, like stature, anemia, shock, dehydration, jaundice, pedal edema, and bladder – bowel distention. Vital signs like respiratory rate, pulse rate, temperature and blood pressures were noted.

A thorough obstetric examination was done. Uterine height, presence or absence of contractions, Bandl's ring ruptures uterus, lie and presentation of the fetus were noted. Presence of fetal sounds, the rate and rhythm were noted. Bladder and bowel distention was noted.

Inspection of vulva for episiotomy, injury and edema noted. A speculum examination to rule out infectious discharge, Vaginal tears, bleeding observed. A pelvic examination done to note cervical dilatation, presence and absence of membranes, presenting part and pelvic assessment for CPD carried out. The mode of delivery with maternal condition,

fetal condition and NICU admissions are noted. All investigations and conditions of mother and fetus observed till their stay in the hospital. An estimation of duration and difficulty of labour was done.

## Results

### Neonatal Outcome

Hydrocephalus	one.	0.8%
Intrauterine death	two.	1.6%
Asphyxia	18	22.5%
Septicemia	38.	45%
Jaundice	45	58.5%

- Total number of deliveries -11655
- Total number of obstructed labour – 80
- Incidence – 0.68%

**Table 1:** Clinical Presentation

Presentation	No. of cases	Percentage
CPD	73	92%
Prolapse	5	6%
Breech	1	1.6%

**Table 2:** Condition of patient

Condition	No.	Percent
Shock	43	54%
Dehydration	57	72%
Toxemia	28	36%
Anemia	78	98%
Tachycardia	75	94%
Genital tract injury	5	6%
Bladder distention	62	78%
Convulsions	5	6%
Sepsis	38	48%

**Table 3:** Fetal outcome

Fetal Outcome	No.	Percent
NICU	43	54 %
Recovered	35	44%
Early neonatal death	08	10%

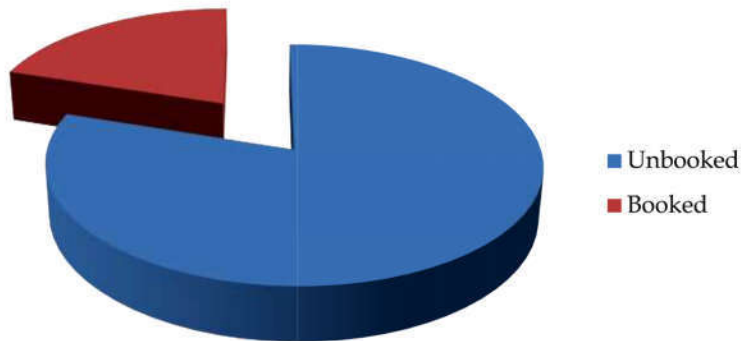
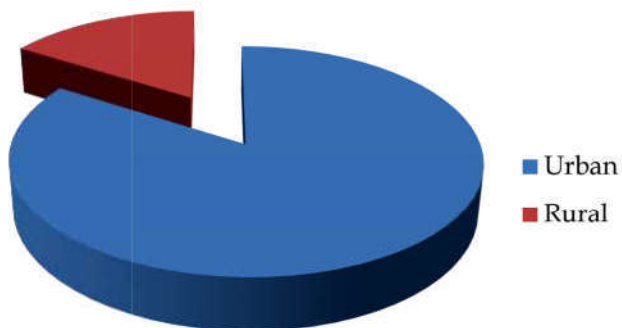
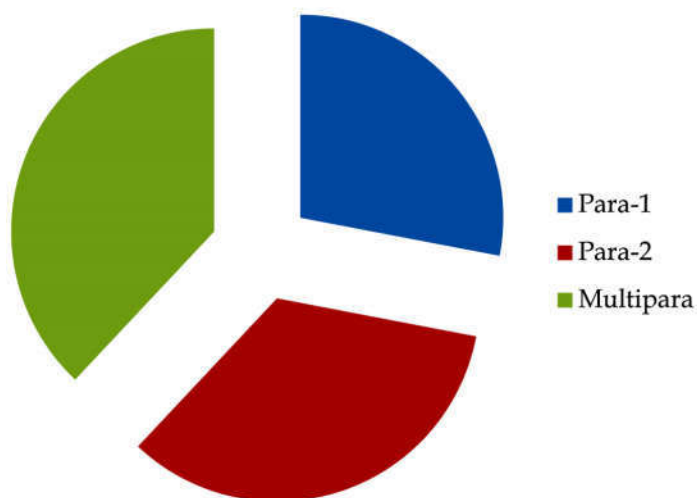
**Table 4:** Sequelae of obstructed labour

Causes	No. of cases	Percent
Eclampsia	2	1.6%
Septicemia	45	56.5%
Ruptured uterus	32	40%
Genito-urinary fistulac	10	12.2%
PPH atomic	7	8.7%
Traumatic	40	50%
Wound infection	60	76%
Secondary suturing	18	22.5 %

**Table 5:** Hospital stay

Days	Hospital stay	
	No. of Cases	Percent
1 - 5	02	1.6%
6 - 10	28	36%
11 - 15	18	22%
15 - 20	10	12%
>20	3	3.75%

68% stayed beyond 9 days

**Fig. 1:** Booking status**Fig. 2:** Locality**Fig. 3:** Parity distribution

## Discussion

A total of 11655 delivered at BTGH, attached to MR Medical college from 01-5-2014 to 30-05-2016. Out of these 80 cases were diagnosed as obstructed labor and its sequelae. This incidence is 0.68%, which is very high when compared to Konje et al which is 0.96% out of the 50 cases 80% were unbooked and 84% were from rural area.

Out of the 80 cases of obstructed labor, 28% were primiparae. 34% were 2<sup>nd</sup>gravidae and 38% were multiparae. Age of 16% was below 20 years, 80% were between 20-30 years and 4% were between 30-40 years (Table 1). There were 46 cases (14%) of previous caesarian sections.

In our study, 4% delivered vaginally of which 2% delivered by forceps and 56% by cesarean section and 40% underwent laprotomy. A study by Konje et al shows 82% emergency caesarian section, 12% of the mothers had normal fetal cardiac activity, 44% had non-recurring pattern and in 44% fetal cardiac activity was absent.

General examination revealed that 54% patients were in shock, 72% were dehydrated and 36% were toxic. Most of the patient i.e. 98% were anemic. Percentage of genital tract injuries was 6% and 6% of them had convulsions. Occurrence of sepsis was in 48% patient (Table 3). Live births were 44% and 46%

Timely interventions in food faith and sound knowledge is important.

*A Multidisciplinary Approach Aimed at*

- Identifying high risk cases

- Improving nutrition during infancy, childhood and pregnancy
- Improving Discouraging early motherhood
- Promote use of reproductive services at each level
- Promote use of contraceptives

Non - utilization of MCH services due to

- Lack of literacy
- Low socio-economic status
- Cultural and religious superstitions
- Improvise
- Better transportation facility
- Availability of blood facility
- Anesthetist
- Specialists at referral units

### Conclusion

- Obstructed labour is one of the most common cause for perinatal and maternal morbidity and mortality.
- Adherence to critically analyzed guidelines and protocols should be insisted.
- A dilemma between complication of interventions and non -interventions, should be given priority.

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