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Original Research Article

EARLY IDENTIFICATION OF VARIOUS FACTORS ASSOCIATED WITH ABNORMAL LABOUR AND THEIR MANAGEMENT

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Abstract

Background & Methods: The aim of the study is early identification of various factors associated with abnormal labour and their management. Labor is a physiological but painful event. The agony and stress a woman suffers is beyond description.

Results: There is reduced need for obstetric interventions if labour is carefully monitored using partograms. As per the study, there is reduced rate of caesarean section if paperless partograms are used. One of the possible reasons for this may be overdiagnosis of complications leading to earlier decision of caesarean section.

Conclusion: The patients were selected after excluding the definite indication for LSCS. The duration of labor is obviously of significance not only to fetus but also to mother & is of great importance for the obstetrical outcome .The time of active labor is also of vital importance for mother & fetus. In this birth setting, for primigravid women the conventional partogram increases the need for intervention without improving maternal or neonatal outcomes, compared with the paperless partogram.

Keywords: associated, abnormal, labour and management.

Study Design: Comparative Study.

1. Introduction

Labor in primiparous is more difficult than that in multiparous. Hippocrates in one of his statements states, among women in labor, those who suffer most are the primipara because they have not previously experienced this kind of suffering[1]. They suffer in the whole of the body, but especially in the lumber region and the ischium for their ischia separate. For hundreds of years this was raised literally and it was thought that the bones of the pelvis underwent a physical separation, especially at the pubic symphsis. As a result of this, cephalo pelvic disproportion remained unrecognised for centuries[2].

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Labor is a physiological but painful event. The agony and stress a woman suffers is beyond description. The concept of providing relief from pain has been tardy in acceptance. However obstetricians are trying to alleviate this misery and have an optimal outcome of labor, but there has always been great opposition by women activists as why a natural phenomenon should be medicalised. After long researches a protocol was developed to optimize the labor outcome i.e. pain relief, short labor, less blood loss and no adverse effect on the neonate[3].
Signs of the onset of labor were also known to the primitive people. The signs are a feeling of weight in the lower abdomen and in the hypogastric region together with the sensation of heat in the genital parts, groin and the thigh with niggling pains in the lower segments of the uterus. The uterus descends so much in the vagina that it can be reached without difficulty. The uterine orifice is soft and swollen, open and moist and in the proportion to the progress of the labor the region above the epigastrium becomes less prominent. At the same time, the loins and the pubic region becomes swollen and the patients passes her water frequently[4-6]. A viscous secretion is discharged from the genital parts, sometimes tinges with blood.

2. Material and Methods

The present study was conducted at MGM Medical College, MYH, Indore from Jan 2021 to Jan 2022 on total 400 patients (200 in Group A & 200 in Group B) been done on active management of labour by using paperless partogram ensuring smooth progress of labor, resulting in the delivery of a healthy baby by vaginal route of a healthy mother.
Patient was allotted a bed in labour room. This was followed by relevant and precise history and general, obstetric examination. All routine investigations were carried out, patient was given plain water enema. Parts prepared and xylocaine sensitivity was done. Explain the procedure to the patient, nature of drugs being used, their possible side effects, their advantages. Drugs are used to provide relief of pain, to shorten the duration of labor and are found to be safe for both mother and infant.

Study Group: A

200 Primi and Multigravida at term where partogram was plotted.

Study Group: B

200 Patients in different stages of labor where partogram were not plotted.

Inclusion criteria:

1. Patient enters the study when she is in active phase of labour, i.e. cervical dilatation >= 4cm and effacement >=70%
2. Age 19 to 35 years.
3. Spontaneous onset of labour.
4. Normal biophysical profile of the baby.

Exclusion criteria:

1. Age <19 yrs or >35yrs
2. Absolute indication of caesarean section
3. H/O previous uterine scar.
4. Congenital anomaly of foetus.

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3. Result

Table 1: Mean duration of labour according to age

Group A	**1st stage**	**2nd stage**
19-23yrs	12.27	1.36
24-29yrs	12.45	0.67
30-35yrs	10.5	0.43

Group B	**1st stage**	**2nd stage**
19-23yrs	13.2	1.13
24-29yrs	12.56	.84
30-35yrs	11.5	.57

Table 2: Mean Apgar Scores of Babies

	Group A	**Group B**
One minute	6.6	6.5
Five minutes	8.7	8.6

Table 3: Distribution of cases according to parity

	Group A	**Group B**
Primiparous	353	347
Multiparous	43	51

Table 4: Mean Duration of Active Phase of Labour

	Group A	**Group B**
<2hrs	13	10
2-3hrs	31	17
3-4hrs	35	37
4-5hrs	123	135
5-6hrs	77	67
>6hrs	97	102

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4. Discussion

In the study, corrected perinatal mortality was 33/1000. It also revealed that there is definite relationship between fetal mortality & length of labor. McCall & Hara had shown that fetal loss was 4 times more in cases with prolonged labor as compared to those with normal labor. Also in cases with features of obstruction, the fetal mortality was 3.5 times higher than whole study group[7]. In his study, 0.2% of intrapartum fetal death occurred while there were 3 neonatal fetal death, giving perinatal mortality rate of 7.2/1000 total birth. Perinatal morbidity in the form of birth injury was seen in 3.57% cases. Dutta (1972) had given the overall PNMR of 818/1000 total births in cases of obstructed labor with 100% mortality in groups C & D. The fetal salvage was directly related to the degree of obstruction rather than the method of delivery employed[8].

A study analyzed the perinatal outcome comparing it with the type of labor disorder. In this study when labor patterns were examined without consideration for type of delivery then it was seen that normal graphic patterns and prolonged latent period are characterized by few perinatal loss (4.9 & 4/1000 total birth respectively) while with protraction disorder it was 15.2/1000 total birth & with arrest patterns of dilatation & descent was 30.6/1000 total births. When both protraction & arrest disorders occur concurrently in a labor, perinatal mortality was found to be 29.4/1000. This shows that arrest & combined patterns have more deleterious effect on fetus[9]. Further, when these mortalities were studied according to the mode of delivery, it was found that with spontaneous deliveries, no losses occur except when it is associated with arrest patterns[10]. With mid forceps deliveries, the perinatal mortality goes on increasing in prolonged latent phase, protracted disorder & arrest disorders respectively. Also arrest patterns yielded high frequencies of neonatal depression following all forms of delivery, but especially after forceps procedure of all kinds[11-12].

5. Conclusion

The patients were selected after excluding the definite indication for LSCS. The duration of labor is obviously of significance not only to fetus but also to mother & is of great importance for the obstetrical outcome .The time of active labor is also of vital importance for mother & fetus. In this birth setting, for primigravid women the conventional partogram increases the need for intervention without improving maternal or neonatal outcomes, compared with the paperless partogram.

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