

A Clinic-Demographic Profile and Outcome Assessment of Ectopic Gestation: an Observational Study

Saba Ghaffari¹, Khatibur Rahman²

¹Senior Resident, Department of Obstetrics and Gynecology, Gauri Devi Institute of Medical Science & Hospital, Durgapur, West Bengal, India

²Senior Resident, Department of Anesthesiology, Gauri Devi Institute of Medical Science & Hospital, Durgapur, West Bengal, India

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Corresponding Author: Dr. Khatibur Rahman

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Abstract

Aim: The aim of the present study was to assess the progress of labor in all ANC's with previous LSCS consenting for vaginal delivery using partogram and to note the fetomaternal outcome.

Methods: A retrospective observational study was conducted at department of obstetrics and Gynaecology, Gauri Devi Institute of Medical Science & Hospital, Durgapur, West Bengal, India for the duration of 12 months in 50 patients with previous LSCS for trial of labor who fulfilled the inclusion criteria. Detailed history regarding age, parity, duration of pregnancy and labour pain was taken from every patient.

Results: Our study included a total of 50 patients with average age 25.05 years with minimum age of a patient being 19 years while the maximum age was 33 years. Majority of the women belonged to 18-24 years. In present study 40 out of 50 patients delivered at the gestational age of 37-40 weeks (80%). Out of these the patients who underwent repeat LSCS were 30 (60%) and those who delivered vaginally were 15 (30%). Out of 30 patients who undergone repeat LSCS, 4 patients had scar dehiscence, 6 patients were taken for LSCS due to non-progression of labor and 20 patients had fetal distress.

Conclusion: The partogram was able to reduce fetomaternal complications and help in early detection of deviation from normal labor thus guiding in timely intervention. The subjects who crossed alert line in partogram were taken for LSCS thus indicating higher efficacy of partogram. With the use of partogram maternal complications in patients with previous LSCS like obstructed labor, prolonged labor, scar dehiscence and scar rupture and other complications like PPH, cervical tears/vaginal lacerations etc. can be prevented.

Keywords: labor, LSCS, partogram, fetomaternal outcome

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Introduction

A picture is worth a thousand words,' as the saying goes. Partograph is a Latin/Greek hybrid word that refers to a pictorial representation of parturition. On a single sheet of paper, a partograph is a composite pictorial record of essential data (maternal and fetal) during labor, entered against time. [1] Partograph is a basic, low-cost prediction technique that is labor-intensive but underutilized due to a lack of understanding. The World Health Organization designed and marketed a partograph as part of the Safe Motherhood program, which was initiated in 1987 with the goal of improving labor management and reducing mother and fetal morbidity and mortality. [2,3]

A partogram is a valuable tool for tracking the progress of labor. Partogram can aid with intrapartum monitoring and identifying any atypical labor patterns in individuals who are having a trial

of labor after a cesarean surgery. As a result, it can assure a positive fetomaternal outcome. [4] The WHO-modified partogram, according to the program, is a great tool for reducing obstructed labor and its implications. Despite the fact that the maternal mortality ratio (MMR) has decreased by about 45 percent in the previous two decades, roughly 300,000 women die each year owing to preventable pregnancy-related problems around the world. [5]

Studies on the duration of labor and patterns of its progress in women with a previous cesarean section have not shown any significant differences from previously known patterns in women with unscarred uteri. [6,7] Thus it has been suggested that patients with a previous cesarean section showing slow labor progress (dysfunctional labor) should be treated in the same manner as women with an unscarred

uterus, including the use of oxytocin to augment labor; an approach that is generally considered to be safe. [8,9] As a result some obstetricians may be inclined to pursue prolonged trials of labor in order to achieve a vaginal birth. Concern should be raised about such an approach because extreme caution has been recommended in patients with arrest of the active phase of labor. [10]

The aim of the present study was to assess the progress of labor in all ANC's with previous LSCS consenting for vaginal delivery using partogram and to note the fetomaternal outcome.

Materials and Methods

A retrospective observational study was conducted at department of obstetrics and Gynaecology, Gauri Devi Institute of Medical Science & Hospital, Durgapur, West Bengal, India for the duration of 12 months in 50 patients with previous LSCS for trial of labor who fulfilled the inclusion criteria. Detailed history regarding age, parity, duration of pregnancy and labour pain was taken from every patient. Examination was done including general physical examination, abdominal examination for fundal height, lie, presentation, engagement, amount of liquor, palpable uterine contraction and fetal heart rate. Pelvic examination was done for pelvic assessment and Bishop score. All the data were

entered in a predesigned proforma. The course of labour in all the patients were recorded on WHO modified partograph. Individual partograph was studied to know the various aspects related to the course of labour and the role of partograph in influencing decision making in abnormal progress of labour was assessed.

Patients with previous LSCS (previous LSCS due to non-recurrent indications like Breech, fetal compromise, abruptio placenta, cord prolapse etc.), adequate pelvis and cephalic presentation in whom the consultant decided to give normal trial of labor attending Gauri Devi Institute of Medical Science & Hospital, Durgapur, West Bengal, India were selected for the study and explained pros and cons of vaginal birth after cesarean section (VBAC). Informed written consent was taken from all consenting patients. Patients with malpresentation, CPD, contracted pelvis, more than previous LSCS, Previous classical CS, previous CS due to prolonged labor or obstructed labor, previous inverted T incision, pregnancy occurring too soon after cesarean section, Pre- term labor, PPRM, placenta previa and Pre-eclampsia/ Eclampsia were excluded from the study.

Results

Table 1: Age distribution

Age in years	N	%
18-24	29	58
25-29	17	34
30-35	4	8

Our study included a total of 50 patients with average age 25.05 years with minimum age of a patient being 19 years while the maximum age was 33 years. Majority of the women belonged to 18-24 years.

Table 2: Gestational age in weeks at the time of delivery and mode of delivery

Gestational age	N	%
37-40	40	80
>40	10	20
Mode of delivery		
LSCS	30	60
Normal Vaginal delivery	15	30
Instrumental delivery	5	10

In present study 40 out of 50 patients delivered at the gestational age of 37-40 weeks (80%). Out of these the patients who underwent repeat LSCS were 30 (60%) and those who delivered vaginally were 15 (30%).

Table 3: Indications for LSCS

Indications for LSCS	N
FETAL DISTRESS	20
NON PROGRESSION OF LABOR	6
SCAR DEHISCENCE	4
Total	30

Out of 30 patients who undergone repeat LSCS, 4 patients had scar dehiscence, 6 patients were taken for LSCS due to non-progression of labor and 20 patients had fetal distress.

Discussion

The partogram is a tool that enables midwives and obstetricians to record maternal and fetal observations simply and pictorially. Different designs of the partogram exist and Cartmill and Thornton [11] hypothesized that the way a partogram is presented may affect a midwife's or obstetrician's perception of the labor progress, and thus, influence the decision-making. This hypothesis has received some support from others (Lavender et al [12]; Tay and Yong. [13] Although the WHO [14] recommended universal application of the partogram, the evidence to support this recommendation is limited. Even after the WHO simplified the partograph model to make it more user-friendly in 2000, the partograph is still rarely used in low-resource areas, and when actually used, it is rarely interpreted correctly.

Our study included a total of 50 patients with average age 25.05 years with minimum age of a patient being 19 years while the maximum age was 33 years. Majority of the women belonged to 18-24 years. In present study 40 out of 50 patients delivered at the gestational age of 37-40 weeks (80%). Out of these the patients who underwent repeat LSCS were 30 (60%) and those who delivered vaginally were 15 (30%). Out of 30 patients who undergone repeat LSCS, 4 patients had scar dehiscence, 6 patients were taken for LSCS due to non-progression of labor and 20 patients had fetal distress. Once the labor curve moves to the right of the warning line, newborn morbidity rises, and it rises dramatically as the labour curve crosses the action line. As a result, the partograph's alert line indicates a high risk of respiratory distress in the fetus. The use of partograph decreases the number of fresh stillbirths and perinatal deaths. [15] Thus, effective vaginal delivery was achieved after a thorough selection of instances for trial of labor in patients with past LSCS. Furthermore, with improved infrastructure and prenatal and postnatal treatment for these patients, maternal and perinatal morbidity and death can be successfully minimized. [16,17] Debdas [13] believes that the partograph is simply too time-consuming for overburdened clinicians and too complicated for many skilled birth attendants — many of whom have not received higher education. The paperless partogram proposed by Dr. Debdas is a low-skill method for preventing abnormal labor.

Conclusion

The partogram was able to reduce feto-maternal complications and help in early detection of

deviation from normal labor thus guiding in timely intervention. The subjects who crossed alert line in partogram were taken for LSCS thus indicating higher efficacy of partogram. With the use of partogram maternal complications in patients with previous LSCS like obstructed labor, prolonged labor, scar dehiscence and scar rupture and other complications like PPH, cervical tears/vaginal lacerations etc. can be prevented. The neonatal morbidity increases as the labour curve moves to the right of the alert line and it is significantly increased as the labour curve crosses the action line. Thus the alert line on the partograph indicates a high risk for the fetus to develop respiratory distress. Use of partograph reduces the incidence of fresh still birth and perinatal mortality.

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