

Plotting of Partograph: A Perspective Review

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Abstract: WHO has recommended use of the Partograph, a low-tech paper form that has been hailed as an efficient tool for the primary detection of maternal and fetal complications during childbirth. Yet despite decades of coaching and investment, implementation rates and capacity to properly use the Partograph remain low in resource-limited settings. Competent use of the Partograph, mainly, using newer technologies, can save maternal and fetal lives by ensuring that labor is strictly monitored for life-threatening complications like obstructed labor are identified and treated. To accommodate the challenges for using Partograph among doctors, health-care systems must establish an environment that supports its correct use. Health-care staff should be updated by providing training and asking them about the difficulties faced at their clinic. Then only the potential of this glorious tool are visiting be maximally utilized.

Keywords: Partograph, Labor monitoring, Normal labor, abnormal labor

1. Introduction

A partograph are visiting be illustration of the observations product of a woman aborning. For the progress of labor and important conditions of the mother and fetus. It absolutely was developed and extensively tested by the earth health organization WHO. It is a complete graphical recording of cervical dilatation and descent of head against duration of labor in hours. It also gives knowledge about fetal and maternal condition that's all recorded on single sheet of paper. The partograph has been established because it is a "gold standard" labor monitoring important tool universally. It's recommended by the world Health Organization (WHO) to use in active labor. The function of the partograph is to seem at the progress of labor and identify and intervene in cases of abnormal labor. Although the partograph has been utilized for over four decades in obstetric practice, reports of obstructed labor and its serious maternal and fetal sequel have questioned the efficacy of the partograph now then.

A prospective Multicenter trial conducted in South-East Asia by the WHO showed significant reduction in prolonged labor, need for labor augmentation and caesarean, and number of intrapartum stillbirths where Partograph were used along with appropriate labour management guidelines. The effectiveness of partograph use in improving the birth outcome is additionally limited as suggest by a Cochrane review. Especially in low- and middle-income countries with

high maternal and morbidity, a budget tool isn't used accurately or as intended during intrapartum care.

History

E.A. Freidman in 1954 provides a foundation basis for development of partograph on the premise of observation of enormous number of women aborning. After that, the composite picture of labor was reported by Philpot in 1972, which combined details of progress of labor along with information about fetal and maternal conditions.

Who Partograph

Overview

- The partograph are often employed by doctors with adequate training in midwifery who are able to: - observe and conduct normal labor and delivery. Perform vaginal examination parturient and assess cervical dilatation accurately - plot cervical dilatation accurately on a graph against the clock.
- There's no place for partograph in deliveries reception conducted by attendants other than those trained in midwifery.
- Whether utilized in health centers or in hospitals, the partograph must be amid a program of coaching in its use and by appropriate supervision and follow up.

Name	Gravida	Para	Hospital number
Date of admission	Time of admission	Ruptured membranes	hours

Fetal heart rate

Amniotic fluid Moulding

Cervix (cm) [Plot X]
Descent of head [Plot O]

Contractions per 10 mins

Oxytocin Uf, drops/min

Drugs given and IV fluids

Pulse ● and BP ▲▼

Temp °C

Urine { protein, acetone

2. Objectives

- Early detection of the abnormal progress of a labor.
- Prevention of the prolonged labor.
- Recognize about the cephalopelvic disproportion long before obstructed labor.
- Assist to assist in early decision on transfer, augmentation, or termination of labour.
- Increase the standard and regularity and standard of all observations of mother and fetus.
- Early recognition of maternal or fetal problems and help to resolve it. The partograph are often highly effective and useful gizmo in reducing complications from prolonged labor for the mother (postpartum hemorrhage, sepsis, uterine rupture and its squeal) and for the newborn (death, anoxia, infections, etc.).

Components of the Partograph

- Part I: Patient identification
- Part II: fetal condition (at top)
- Part III: progress of labor (at middle)
- Part IV: maternal condition (at bottom)

Part I: Patient identification-

- Name, Gravida, parity
- Hospital number
- Date and time of admission
- Time of ruptured membranes.

Part II: Fetal condition-

- 1) Monitor and assess fetal condition
 - Fetal heart rate
 - Liquor
 - Moulding the fetal skull bones

Part III: Progress of labor-

- Cervical dilatation (X)
- Descent of the fetal head (O)
- Uterine contractions
- Fetal position

Part IV: Maternal condition-

- 1) Assess maternal condition regularly by monitoring:
 - Pulse- every 30 mins & marked with a dot (.)
 - Blood Pressure- Recorded in vertical line every 4 hours & marked with arrows.
 - Temperature- Recorded every 2 hours.
 - Urine Volume- analysis for protein and acetone
 - Oxytocin- Amount per volume IV fluids in drops per minute, every 30 mins.
 - Drugs- Any additional drugs given
 - IV fluids- type and amount used.

Principles of Plotting Partograph

- The active phase of the labor is commences at 4 cm cervical dilatation.
- The latent phase of labor is mustn't be last longer than 8 hours.
- During active labor, the speed of cervical dilatation shouldn't be slower than 1cm/ hours.

- A lag time 4 hours between a slowing of labor and then the need for intervention is unlikely to compromises the fetus or woman and avoid unnecessary intervention.

Method of Recording Partograph

- 1) Patient information- Fill out name, gravida, Para, hospital number, date and time of admission and time of ruptured membranes.
- 2) Fetal pulse- the speed of the fetal sign indicates the state of the fetus inside the uterus, Record every half hour.
- 3) Amniotic fluid- Record the colour of humor at every vaginal examination.
 - I: Intact membrane
 - C: Clear fluid, membrane ruptured
 - M: Meconium stained fluid
 - B: Blood stained fluid.
- 4) Moulding- Moulding might be a state of reduction or loss of space between skull bones. Recording of degree of moulding-
 - 0: Bones are separated and sutures are often felt easily.
 - 1: sutures apposed
 - 2: sutures overlapped but reducible.
 - 3: sutures overlapped and not reducible.
- 5) Cervical dilatation- Assessed at every vaginal examination and marked with cross (X). Begin plotting on the partograph at 4 cm. This graph is consists of homogenous squares, ten square vertically, each square has indicate one centimeter of cervical dilatation. A. Alert line: A line starts at 4 cm of cervical dilatation to the aim of expected full dilatation at the speed of 1cm per hour. B. Action line: Parallel and 4 hours to the correct of the alert line.
- 6) Descent of the head- this could be often assessed by abdominal examination before doing vaginal examination. Refers to the component of the highest (divided into 5 parts) palpable above the symphysis pubis. It is recorded as a circle (O) at every vaginal examination.
- 7) Uterine contractions- Uterine contractions are recorded graphically on the partograph in line with their strength and frequency. Observation of contraction is made half hourly within the active phase. Palpate the amount of contractions in 10 minutes and their duration in seconds.
- 8) Oxytocin drip- This consists of two lines, one for the record of unit of oxytocin per liter of intravenous fluid and other one is for drop of fluid per minute. The recording is additionally made at the interval of half-hour because the uterine contractions.

Top of Form
- 9) Bottom of Form9. Drugs and other intravenous fluids- Record any additional drug is given and is recorded at the actual point of some time. This includes sedatives, antibiotics, IV fluids etc. The name of the drugs and doses given should be written clearly within the long box.
- 10) Maternal condition-Pulse: Record every half-hour and mark with a dot. Blood pressure: It is recorded every 4 hours and mark with arrows. Temperature: Record every 2 hours.

- 11) Urine analysis- During the course of labor, the examination of urine is incredibly important. Just in case of maternal distress, the amount of urine may decrease and might contain ketone bodies.

Advantage of Using Partograph

- One sheet of paper can provide the little print of necessary information at a time.
- No must record about labor events repeatedly.
- Gives clear picture of the normality and abnormality parturient at a time.
- It can predict about deviation from duration of labor. So appropriate steps may be taken in time.
- It facilitates the handover procedure of staffs.
- Save working time of staff against the writing labor notes in long hand.
- Increases Educational value for all staff.

3. Conclusion

Common use of the tool partograph can save maternal and fetal lives by ensuring that labor is strictly monitored by which life-threatening complications are identified and treated. To handle the challenges for using partograph among doctors, health-care systems must establish an environment that supports its correct use. Health-care staff should be updated by providing training and asking them about the difficulties faced at their hospital. Then only the potential of this excellent tool are visiting be maximally utilized. Partograph could even be an easy, clear easy to use cost-effective tool for monitoring of labor and decisions making, it improves perinatal outcomes, if it can effectively use it facilitates any level of care.

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