5.8.2 USE OF A PARTOGRAM

BACKGROUND INFORMATION

The partogram provides a graphical illustration of the progress of labour and is considered by the World Health Organisation (WHO) to be a valuable tool for managing intrapartum women. Studies, including a multicentre randomised control trial involving 35,000 women, have shown improved maternal and fetal outcomes with use of the partogram. Use of the partogram with its alert and action lines – and an agreed upon management protocol when these lines are reached has been found to reduce the incidence of prolonged labour, augmentation, emergency caesarean section and intrapartum stillbirth in both nulliparous and multiparous women.1, 2

The partogram:
- Depicts the progress of labour at a glance
- Enables failure to progress to be readily recognised
- Is simple to use
- Provides a practical teaching aid
- Is an efficient means of exchange of technical information about labour progress between teams of caregivers.2

KEY POINTS

1. The partogram should be used for all women admitted in established labour. When the partogram is commenced at the beginning of the induction process the Alert and Action lines are drawn when the women is in the active phase of labour.

2. Established labour is defined as the presence of regular contractions, increasing in strength and duration, leading to progressive effacement and dilatation of the cervix.2

3. A rate of 1cm/hour in the active phase of labour is often accepted as normal progress in labour. Many women who show slower rates of cervical dilation will proceed to normal birth.2

4. The Alert line is a simple tool which separates women into two groups:
   - Women with cervical dilatation equal to / greater than 1cm/hour who are highly unlikely to require operative intervention.
   - Women with cervical dilatation slower than 1 cm/hour who are more likely to require operative intervention.3

5. The WHO partogram does not differentiate between nulliparous or multiparous women’s labours.4

DOCUMENTATION

The partogram is a record of care, which constitutes a legal document but is also an avenue for identifying accountability in midwifery practice. Therefore, accurate, legible and comprehensive entries should be made in accordance with the APHRA guidelines on documentation.5 and in black ink. Such entries should be made contemporaneously and authenticated with the midwives/students full and legible signature.

PROCEDURE

ADMISSION & ASSESSMENT FINDINGS PLUS MEDICAL/OBSTETRIC HISTORY

- Place the woman’s identification label in the top left-hand corner.
- The admission details should be recorded as soon as practicable following arrival.
- Enter all details in the appropriate sections on the front of the partogram, including date, gravidity, parity, EDD, gestation, date and time of commencement of labour and date, time and mode of rupture of membranes. Include age, blood group, weight, any relevant obstetric & medical history, present pregnancy, risk factors, allergies and group B streptococcus status.
DATE

- Record the commencement date at the top of the partogram. When the date changes at midnight write the new date above the times.

TIME

- The numbered (0 1 2 3 etc) full vertical lines are hour lines.
- Note the exact time (e.g. 1450 hours) of the first observation that you wish to record (e.g. fetal heart, vaginal examination, etc). Go back to the nearest whole hour – 1400 hours in this example.
- Fill in the time scale along the top of the partogram: 1400, 1500, 1600 etc (1400 is 0 hour line) and record the observation on the partogram (in this example just to the left of the 1500 line).
- Times must be written along the top of the partogram and may be written along the mid section of the page.

MATERNAL ASSESSMENT

- Record maternal blood pressure, pulse, temperature, respirations, and other observations (e.g. reflexes, blood sugar levels) on the graph at the top of the partogram.
- Using the measurements down the left side of the graph record:
  - Systolic blood pressure with a $\Lambda$
  - Diastolic blood pressure with a $\vee$
  - Pulse with a $\bullet$

For Example:

<table>
<thead>
<tr>
<th>Observation at 1500 hours and 1630 hours respectively</th>
</tr>
</thead>
<tbody>
<tr>
<td>1400</td>
</tr>
<tr>
<td>BLOOD</td>
</tr>
<tr>
<td>130</td>
</tr>
<tr>
<td>120</td>
</tr>
<tr>
<td>$\wedge$</td>
</tr>
<tr>
<td>$\vee$</td>
</tr>
<tr>
<td>90</td>
</tr>
<tr>
<td>80</td>
</tr>
<tr>
<td>70</td>
</tr>
<tr>
<td>60</td>
</tr>
<tr>
<td>PULSE</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Temperature</td>
</tr>
<tr>
<td>Respiration</td>
</tr>
<tr>
<td>Reflexes</td>
</tr>
<tr>
<td>Other (BSL/SaO2)</td>
</tr>
</tbody>
</table>

FETAL ASSESSMENT

Record the FHR with a dot as follows:

- The vertical lines are half-hourly so that the quarter-hourly recordings can be made.
- During the second stage of labour the FHR is recorded 5 minutely in the boxes provided (if the fetus is not being continuously monitored). The time is written in the top left and the fetal heart rate is written below.
- Second stage fetal heart rate recordings must also be documented half hourly on the graph as in the first stage.
- Circle if continuous electronic FHR monitoring is in progress and document the date and time of commencement.
**Amniotic Fluid.**

- In the box that correlates with the correct time according to the vertical lines record half hourly absence or presence, and colour of fluid as follows:
  - I - membranes intact
  - C - amniotic fluid is clear
  - B - amniotic fluid is blood stained
  - M1 - amniotic fluid has light meconium staining.
  - M2 - amniotic fluid has particulate meconium staining.
  - M3 - amniotic fluid which has ‘pea soup’ meconium staining.

**LABOUR ASSESSMENT**

**Contractions**

- These are recorded graphically below the fetal assessment information. An area of 5 blank vertical squares go across the width of the graph and record contractions as ‘frequency in 10 minutes’.
- Each square represents 1 contraction. Therefore if 2 contractions occur in 10 minutes, 2 squares will be shaded.
- Use the key for shading to demonstrate the strength of contraction:
  - Weak and/or 20-40 seconds duration
  - Moderate and 20-40 seconds duration
  - Strong and >40 seconds duration

**Abdominal palpation**

Record in abdominal palpation box. Note lie, presentation and position of fetus, eg. LOA, ROA.

**Cervicograph**

- The cervicograph is that section of the partogram which depicts cervical dilatation and descent of the presenting part in relation to time. Use of the cervicograph enables the progress of labour to be ascertained and delay in to progress readily recognized

**Dilatation**

Record X for the cervical dilatation on the appropriate line and at the time the examination is carried out.

**Descent**

Descent of the head is measured by abdominal palpation and is expressed in terms of fifths above the pelvic brim. Record O for the level of descent at each vaginal examination. At 0/5, the sinciput is at the level of the symphysis pubis.

**Alert and Action lines**

Lines are to be drawn on the partogram at the time of the first vaginal examination in active labour, ie, when the woman is 4cm or more dilated.

**Alert line**

A line drawn from the point of cervical dilatation noted at the first vaginal examination in active labour. This line denotes a dilatation rate of 1cm/hour.

**Action line**

A line parallel and 4 hours to the right of the alert line.
Management

- A vaginal examination is performed 4 hours after the initial one or earlier if clinically warranted.
- If subsequent examination shows dilatation between Alert line and Action line a repeat vaginal examination is carried out in 2 hours.
- At this examination if the cervical dilatation is touching / crossing the Action line, the Labour and Birth Suite medical team must evaluate the woman’s progress in labour and instigate appropriate intervention.

OXYTOCIN ADMINISTRATION

Units: record half hourly in black the number of units per 500mL of intravenous fluid.
ML/h: record half hourly in black the number of mL/h that has infused in the half-hour just passed.

For example:

<table>
<thead>
<tr>
<th>Time</th>
<th>Syntocinon units</th>
<th>mL/h</th>
</tr>
</thead>
<tbody>
<tr>
<td>0900</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>1000</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>1100</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>1200</td>
<td>10</td>
<td>36</td>
</tr>
</tbody>
</table>

In this example the infusion commenced at 0930 hours at 6mL/h. Therefore between 0930 and 1000 6mL was infused.

INVESTIGATIONS

- Document any investigations performed since labour admission or those prior to induction of labour. For example: Full Blood Count, Group and Hold, vaginal swab.

INTRAPARTUM MEDICATIONS

Epidural

- Draw an arrow to indicate the time of epidural insertion and subsequent medications administered.
- Epidural medication administration details must also be recorded on the MR280.

Other medications

- In the box provided, write the name, dose and route of administration of medication. Draw an upwards arrow along the page to indicate the correct time of administration.
- Medications must also be recorded on the Medication Chart MR810.

FLUID BALANCE

INPUT

Oral fluids

- Record type and volume in mL.

IV Fluids

- When an intravenous infusion is commenced record the fluid type, total volume and any medication added (e.g. Syntocinon).
- Record the commencement time with an arrow along the time lines.
- When complete, record the total volume infused in the appropriate time box. When bag/pack is completed and infusion is to be maintained, record another arrow at commencement time.
- Where a record of input fluid volume is required hourly (e.g. in patients with known risk factors such as pre-eclampsia), a progressive volume total may also be documented.
OUTPUT

Urine
- Measure and record the volume of urine (if required) or document PUIT for each void.
- Record urinalysis (if required) for protein and ketones in the appropriate time box.

Vomitus
- Record volume in mL in the appropriate time box.

Blood loss
- Record volume in mL in appropriate time box.
- Blood loss should be weighed. Weigh the pad, incontinence sheet, etc, then subtract the weight of a dry pad, incontinence sheet, etc, to give the amount of total blood loss.

STAFF INITIALS
- Staff (including midwifery and medical students) who have performed observations are to provide their initials in the allocated boxes.
- Full name, signature, designation and initial are to be recorded on the reverse side of the partogram.

VAGINAL EXAMINATIONS

Date/time
- Record for each examination.

Indication
- Specify the reason for the vaginal examination e.g. to assess progress of labour, apply FSE.

Cervical Effacement/length
- Estimate length in cm.

Dilatation
- Measured dilatation in cm.

Cervical Position
- Stated as either anterior, posterior or midline.

Application
  0: not applied
  L: loosely applied
  M: moderately applied
  T: tightly applied.

Consistency
  F: the cervix is firm to touch.
  M: the cervix is medium to touch
  S: the cervix is soft to touch.

Membranes/liquor

**Presentation**

- Stated as cephalic, breech, cord, etc.

**Position**

- Record LOA, ROP, etc.

**Caput**

0: no caput
+ : small caput,
++: moderate
+++: large caput.

**Moulding**

0: no moulding,
+ : sutures are apposed,
++: sutures overlapped but reducible
+++: sutures overlapped and not reducible.

**Station**

- This is measured in cms above (-) or below (+) the ischial spines, eg. -5, -4, -3, -2, -1, 0 (at spines), +1, +2, +3, +4, +5.

**Head above brim (as per abdominal palpation)**

5/5: completely above,
4/5: sinciput high, occiput easily felt,
3/5: sinciput easily felt, occiput felt,
2/5: sinciput felt, occiput just felt,
1/5: sinciput felt, occiput not felt
0/5: none of head palpable.

**FHR Post-VE/FBS**

- Record the fetal heart rate after a vaginal examination and the result of a fetal blood sample here.

**Bishops Score**

- See scoring guide on the reversed side of the partogram. Record if induction of labour is required.

**Performed by**

- Include signature, printed name and designation.

**GUIDELINES FOR NORMAL LABOUR**

- Refer to guideline references on the reverse side of the partogram for observations in normal labour.
• See Clinical Guidelines, Section B 5.8.1 Management During the First stage of Labour.

GUIDELINES FOR VARIANCES AND KNOWN RISK FACTORS TO NORMAL LABOUR
• Refer to guideline references on the reverse side of the partogram for management of labour with deviations from normal or with known risk factors.
• See Clinical Guidelines, Section B 5.8.3 Management of Delay in First Stage Labour.

PATHOLOGY REQUESTS
• Circle one or more should the following be required:
  ➢ Testing of cord blood, kleihauer and/or placenta
  ➢ A research participant.

INSTRUMENT COUNT
• Prior to the birth, record the number of delivery instruments, vacuum handles and abdominal packs opened. Following the birth ensure all items used are accounted for and recorded.
• Other instruments used are to be documented on the MR 275 – ‘Operative Vaginal Delivery’ and ‘Perineal Assessment and Management’.

RECORDING OF CARER
• Legibly document name, signature, designation and initials.

REFERENCES (STANDARDS)

Do not keep printed versions of guidelines as currency of information cannot be guaranteed. 
Access the current version from the WNHS website.