

Wrightington, Wigan and Leigh Teaching Hospitals NHS Foundation Trust

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| Title of Guideline | Intra-Partum Care |
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| Division & Specialty | Surgery - Obstetrics |
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| Explicit definition of patient group to | Maternity patients |
| which it applies | |
| Abstract | |
| Statement of evidence base of the | |
| guideline | |
| Evidence Base (1-5) | |
| 1a Meta analysis of RCT | |
| 1b At least 1 RCT | |
| 2a At least 1 well designed | |
| controlled study without | |
| randomisation | |
| 2b At least 1 other well designed | |
| quasi experimental study | |
| 3 Well –designed non-experimental | |
| descriptive studies | |
| (ie comparative / correlation and | |
| case studies) | |
| 4 Expert committee reports or | |
| opinions and / or clinical | |
| experiences of respected | |
| authorities | |
| 5 Recommended best practise | |
| based on the clinical | |
| experience of the guideline | |
| developer | |
| Consultation Process | O&G Guideline Group |
| Target Audience | Maternity staff |
| This guideline has been registered | |
| with the trust. However, clinical | |
| guidelines are guidelines only. The | |
| interpretation and application of | |
| clinical guidelines will remain the | |
| responsibility of the individual | |
| clinician. If in doubt contact a senior | |
| colleague or expert. Caution is | |
| advised when using guidelines after the review date. | |
| the review date. | |

Intra-Partum Care

Written by Helen Collins and Audrey Livesey, March 2001, reviewed March 2004, July 2005 and March 2006. Updated (NICE guideline) August 2008, process for audit added Oct 2010, documentation clarified July 2012. Diamorphine added May 2014. Delayed cord clamping added August 2014. Updated (NICE guideline) by Elaine Church March 2015. Immediate care of newborn added August 2015, Updated by Amit Verma October 2016. Updated by Jo Birch and Sharon Bell January 2019. Fluid management appendix added July 2020 (v13.1). Skin to skin safety added September 2020 (v13.2). Link to Obs 13 removed June2021 (v13.3). Updated by Jo Birch and Chris Lowe February 2022 (v14)

First Stage of Labour

Definitions

Latent first stage of labour – a period, not necessarily continuous, when there are painful contractions and there is some cervical change, including cervical effacement and dilatation up to 4 cm.

Established first stage of labour – when there are regular painful contractions and there is progressive cervical dilatation from 4 cm.

Communication

All women in labour should be treated with respect. Ensure that the woman is in control of and involved in what is happening to her and recognise that the way in which care is given is key to this. To facilitate this, establish a rapport with the woman, ask her about her wants and expectations for labour, and be aware of the importance of tone and demeanour, and of the actual words used. Use this information to support and guide her through her labour (NICE 2014).

Midwives should also ensure that the birth plans are discussed, and women should be given informed choices in all aspects of their care, in all stages of labour.

Ascertain whether the woman prefers the management of her third stage and advise active management if no preference (NICE 2014).

Clinical intervention should not be offered or advised as routine when labour is progressing normally, and the woman and baby are well (NICE 2014).

Woman should be encouraged to mobilise and be upright in labour, adopting comfortable positions and utilising birthing aids/ accessing the birthing pool if assessed as low risk.

Record Keeping should be contemporaneous and accurate (NMC 2015). Midwives should always work within their professional remit paying attention to the appropriate Trust guidelines and the N.M.C. Midwives Rules & Standards / The Code of Practice. On recognising a situation that is outside their sphere of practice, appropriate medical aid should be summoned.

Procedure

| | Action | Rationale |
|----|--|--|
| 1. | Support in labour Women in established labour should receive 1:1 care and not be left on their own for long periods. | Research suggests that women who are supported by a midwife are less likely to need analgesia and are more likely to achieve a spontaneous vaginal delivery. |
| | On admission to labour ward room explain to the woman and her birth partner the admission procedure. | To try and ensure that they both understand reasons for assessment and obtaining patients consent for examination. |
| 2. | An intrapartum risk assessment is undertaken by review of the clinical records to identify any risks which should be communicated to the shift co-ordinator and or senior medical staff. The risk assessment will be documented on page 2 of yellow the intrapartum record. An intrapartum skin care risk assessment (Appendix 1) should be completed and filed in the notes. | To establish whether any risk factors exist and to communicate and manage appropriately. |
| | An individual management plan will be documented within the yellow records for any identified risks on page 4 | To document that a clinical risk assessment has been done |
| 3. | Encourage woman to empty her bladder and collect sample of urine for routine testing. | A full bladder can cause discomfort during examination. Urine test is required to exclude abnormality. |
| 4. | Make sure that the woman is comfortable and ensure privacy obtain history of signs of onset of labour, i.e. regular contractions/spontaneous rupture of membranes/show etc. and fetal activity. | To aid in assessment of patient and avoid unnecessary embarrassment |
| 5. | Undertake baseline examination as follows Temperature Pulse Blood pressure Urinalysis Oedema | To assess maternal and fetal wellbeing and to identify any deviation from normal. |

- 6. Undertake abdominal examination and palpation.
 - Fundal height, fetal lie/position/presentation
 - Auscultation of fetal heart with Pinard for a minimum of one minute following a contraction.
 - Check maternal pulse rate is different from fetal heart rate. Use pulse oximeter to record maternal heart rate if available.
 - Palpate and assess uterine contractions, defining their length, strength and frequency.
 - The use of admission CTG in lowrisk women is not recommended in any setting.

- To obtain relevant information to aid diagnosis of labour, and exclude any abnormalities
- To confirm fetal size within normal limits and presentation
- To assess fetal wellbeing
- To ensure that it is the fetal heart that has been auscultated.
- To evaluate progress and onset of labour

- 7. Offer vaginal examination if in established first stage and consider an examination if this is in doubt
 - Assess cervical effacement and dilatation
 - Assess relationship of presenting part to ischial spines
 - Identify fetal landmark
 - Assess whether membranes intact or absent. If absent ascertain colour of liquor seen and discuss findings with the woman and partner
 - If meconium stained inform medical staff and perform continuous cardiotocograph.
 - Amniotomy is not part of normal physiological labour

- To evaluate stage of labour
- To assess descent of presenting part and progress in labour
- To assess position and attitude of fetus
- Aids in decisions re management of labour, and assessment of fetal wellbeing.
- To keep women informed of their progress to give support
- To assess fetal well being.
- It should be reserved for women with abnormal labour progress

8. Discuss the woman's needs and expectations for labour which should include the Birth Plan.

The birth partner should be included in these discussions.

Pain relief and coping strategies should also be discussed

Informed discussions should also include active 'v' physiological delivery of the placenta.

Discuss and obtain verbal consent for baby to have Vitamin K and type of administration available following delivery To establish hers needs and preferences.

To assess her expectations at the earliest opportunity so that support and advice can be given if necessary.

To give unbiased information to enable her and her partner to make an informed choice

- 9. If in latent phase (0 –4cms)
 - Women should be offered the opportunity to return home or alternatively remain in hospital.
 - Offer explanation and coping strategies to include mobilisation, hydrotherapy, breathing and relaxation techniques.
 - Offer analgesia as required. See Pain Relief in Labour, Guideline Obs 129.
 - Give advice on when to re-contact or return to the maternity unit
 - If there are any concerns regarding a prolonged latent phase discuss with an obstetrician for a management plan. This management plan must be documented in the medical records.
 - Contemporaneous records must reflect all care and advice provided

- Need not be on delivery suite as not in active labour
- To support the woman and her partner and promote normality in the latent phase of labour

| If in active phase (>4 cms) Transfer to a labour room The woman should receive supportive 1:1 care and should not be left on her own except for short periods or at the woman's request: Commence on partogram Assess frequency of contractions 1 hourly Maternal pulse hourly Maternal temperature and blood pressure should be recorded 4 hourly Vaginal examination should be offered at least every 4 hours If dilatation is less than 2cm in 4 hours (or labour progress slowing for multiparous women) refer to Guideline Obs 38 - Dysfunctional labour. Fetal heart rate monitoring should be carried out in accordance with the Intrapartum Fetal Monitoring | To gid the manitoring of labour and |
|--|---|
| Guideline (Obs 11). Ongoing consideration should be given to the woman's emotional an psychological needs including her desire for pain relief. Offer analgesia as required. See Pain Relief in Labour, Guideline Obs 129. | d |
| 11. Encourage regular emptying of the bladder and document on partogram. | To maintain comfort of woman and prevent over distension of the bladder. This may also facilitate descent of the presenting part. |
| Encourage adequate hydration and nutrition during labour. Refer to Appendix 6 regarding fluid | To prevent dehydration, ketosis/ acidosis which will aid progress in labour and maintain good energy levels Guideline 13 |
| replacement 12. Maternal personal hygiene should be maintained. | To reduce risks of infection and promote maternal comfort. |

Second Stage of Labour

Definitions (NICE 2014)

Passive Second Stage of labour

The finding of full dilatation of the cervix before or in the absence of involuntary expulsive contractions.

Active second stage of labour

- the baby is visible
- expulsive contractions with a finding of full dilatation of the cervix or other signs of full dilatation of the cervix
- maternal effort following confirmation of full dilatation of the cervix in the absence of expulsive contractions.

Delay in second stage of labour.

Nulliparous women:

- **Suspect delay** if progress in terms of rotation and/or descent of the presenting part is inadequate **after one hour** of active second stage.
- Diagnose delay in the **active** second stage when it has **lasted 2 hours** and women should be transferred to obstetric-led care if birth is not imminent/ request review by on-call obstetric registrar/consultant and inform shift leader.
- Birth would be expected to take place **within 3 hours** of the start of the active second stage in most women.

Parous women:

- **Suspect delay** if progress in terms of rotation and/or descent of the presenting part is inadequate **after 30 minutes** of active second stage.
- Diagnose delay in the active second stage when it has lasted 1 hour and women should be transferred to obstetric-led care if birth is not imminent/ request review by on-call obstetric registrar or consultant-on-call and inform shift leader.
- Birth would be expected to take place **within 2 hours** of the start of the active second stage in most women.

The total second stage of labour regardless of parity should not exceed 4 hours

Procedure

| | Action | Rationale |
|----|--|---|
| 1. | Confirm full dilatation by vaginal examination. | To diagnose onset of second stage |
| 2. | Upon confirmation of full cervical dilatation in a woman with regional analgesia consider delaying active pushing | To allow passive descent of the head and help prevent maternal exhaustion. |
| | Nullipara – allow up to 2 hours | NICE advises: |
| | Multipara – allow up to 1 hour | Upon confirmation of full cervical dilatation in a woman with regional analgesia, unless the |
| | The length of delay needs to be planned in conjunction with the woman dependent on how high the head is at the onset of the passive second stage bearing in mind that the total length of second stage (active and passive) must not exceed 4 hours. | woman has an urge to push or the baby's head is visible, pushing should be delayed for at least 1 hour and longer if the woman wishes, after which actively encourage her to push during contractions. In Greater Manchester 2 hours for nullipara and 1 hour for multipara is widely adopted. |
| | Without regional analgesia commence pushing when there is an urge to do so. | |
| 3. | Following diagnosis of second stage of labour (passive) • Monitor and record fetal heart in accordance with recommendations in Guideline Obs 11 Intrapartum fetal monitoring | To monitor and assess fetal condition. Monitoring is more frequent in the active second stage as there is a greater likelihood of decreased intervillus blood flow following commencement of pushing. Any late decelerations or variable decelerations that take longer to recover should be detected by this monitoring. |
| | Record the maternal pulse rate every 15 minutes (to differentiate between maternal and fetal heart rate), blood pressure hourly and continue to monitor temperature 4 hourly throughout the second stage | To monitor for early signs of maternal distress |
| 4. | Assess and record contractions every 30 minutes specifying length, strength and frequency. If contractions inadequate refer to Guideline Obs38 Dysfunctional labour. | To determine adequate expulsive forces. To ensure effective contractions and progress in the second stage. |

| 5. | Observe and record vaginal loss and note any change of colour of | To identify any early signs of fetal compromise. |
|---------|---|--|
| | liquor. | To assess for possibility of placental |
| | Monitor for any heavy flesh blood loss P.V. | abruption. |
| 6. | Observe for any signs of full bladder and encourage woman to use a bed pan or catheterize if necessary. | To reduce likelihood of bladder damage, and descent of head may be encouraged. To keep woman comfortable. |
| 7. | Position for birth: semi prone or lateral. The woman may wish to adopt an alternate position, e.g. all fours, squatting. | To help create an efficient uterine contraction pattern, and improve pelvic dimensions. To allow easy access for fetal monitoring. To give good exposure of the perineum and present a clear field for delivery and comfortable |
| | Discourage the woman from adopting the supine or semi-supine position | To prevent supine hypotension. |
| 8. | Prepare for delivery | To facilitate orderly conduct of delivery. |
| | Equipment required: 1. Delivery pack 2. Tap water 3. Lignocaine 4. Syntometrine (1ml ampoule) or syntocinon (dependant on BP) | Lignocaine is no longer kept in the delivery rooms. Bring it into the room to be prepared for the need to infiltrate for episiotomy. No need to draw up routinely. To prepare for active management of the third stage and reduce the risk of excessive blood loss. |
| 9. | Aim to keep woman and partner involved in all developments and reassure regarding progress of events. | To promote confidence in woman |
| | Promote a calm atmosphere. | |
| | Introduce the woman and her birth partner to the second midwife assisting in delivery. | |
| 10. | Process of delivery | |
| | The woman should be told to be guided by her own urge to push observing fetal descent. | |
| | Deliver head by either hands on (guarding perineum and flexing the babies head) or hands poised (hands off the perineum and the baby's head but in readiness) | To reduce likelihood of perineal damage by enabling the smallest diameter of the head to be delivered. |
| <u></u> | technique. Observe for restitution, | To alert to the possibility of difficulties with |

and delivery of anterior shoulder. delivery of shoulders. Unless a physiological third stage To aid delivery of placenta and reduce has been requested administer likelihood of post-partum haemorrhage. syntometrine 1ml ampoule IM after birth (consider timing if delayed cord clamping is facilitated) Syntometrine is contraindicated in hypertensive women who should have Blood pressure must have been syntocinon 10 IU intra-muscular instead. confirmed as normal during labour prior to giving syntometrine Research (Vain et al 2014) has shown that If there is no need to transfer the placental transfusion of blood from the baby directly to the resuscitaire, placenta to the new born baby is beneficial in and no contraindications, cord preventing anaemia of the newborn. This clamping should be delayed for at transfusion will still occur even if the baby is least 1 minute but no longer than 5 higher than the uterus such as when on the minutes unless requested by mother's abdomen or chest and so delayed mother. The baby may be delivered cord clamping need no interfere with onto the mother's abdomen or immediate skin-to-skin contact. There is no chest prior to cord clamping. need to keep the baby at the level of the vagina prior to cord clamping. In case of any an unexpected low Apgar at Double clamp the cord delivery or a deterioration of the baby shortly after delivery. Routine episiotomy should not be carried out. If an episiotomy is required the recommended technique is a right mediolateral incision into the perineum at 45-60 degrees. Prior to this the woman should have been given adequate local anaesthetic into the perineum except in an emergency. To encourage the bonding process and maintain good body temperature and also Skin to skin contact should be assist with the initiation of breastfeeding. encouraged and promoted straight after delivery Record keeping should be To give a full and true record of events and contemporaneous throughout observations made, and any interventions labour. needed during labour. This process is in Record all events – this may be accordance with N.M.C. Midwives Rules & facilitated by appropriate use of the Standards / The Code of Practice. partogram. 12. Immediate care of the newborn and the initial check should be carried out as in Guideline Obs 93

Third Stage of Labour

Definition

The third stage of labour is from the time of the birth of the baby until the expulsion of the placenta and membranes (NICE 2014).

Physiological management involves:

- no routine use of oxytocic drugs
- no clamping of the cord until pulsation has stopped
- delivery of placenta by maternal effort.

Active management involves:

- routine administration of an oxytocic drug
- delayed clamping and cutting of the cord
- controlled cord traction after signs of separation of the placenta.

Prolonged third stage:

- greater than 30 minutes for active management
- greater than 60 minutes for physiological management.

The method of conducting the third stage, i.e. active or expectant/physiological management is dependent on many factors including:

- ♦ The woman's informed preference.
- Midwives' skill and confidence in the selected method.
- Absence of previous history of third stage complications.
- Normality of present pregnancy and labour.

Active management is advised (NICE 2014) however women at low risk of haemorrhage who request physiological management of the third stage should be supported in their choice. The benefits and risks of both should have been discussed fully with them antenatally to allow informed choice.

| | Active | Physiological |
|-----------------------|-------------------|------------------|
| Length of third stage | shorter | longer |
| Nausea and vomiting | 100 in 1000 women | 50 in 1000 women |
| Haemorrhage > 1 litre | 13 in 1000 women | 29 in 1000 women |
| Blood transfusion | 14 in 1000 women | 40 in 1000 women |

Procedure

| | Action | Rationale |
|----|---|--|
| 1. | Throughout this stage midwives should keep the woman informed and offer support as necessary. • Assess general physical condition, as shown by her colour, | To allay anxieties and give reassurance. To detect any deviations from normal. |
| | respiration, vaginal blood loss and her report of how she feels. If there is a postpartum haemorrhage, retained placenta or maternal collapse transfer to obstetric led care and carry out more frequent observations to assess the need for resuscitation. If the placenta does not deliver within 30 minutes for active third stage or 60 minutes for passive | To ensure the woman receives appropriate care by the appropriate team members. |
| 2. | refer to obstetrician. Assist the mother to be semi- recumbent in a dorsal position, sat on a birthing chair or squatting position. Use wedges, pillows and physical support from the partner. | To assist delivery of placenta and membranes whilst ensuring the woman's comfort and safety. |
| 3. | Drape a towel over the abdomen and place the left hand on the fundus of the uterus. | To assess contraction of the uterus. |
| 4. | Await signs of separation of the placenta i.e trickle of blood from the vagina, lengthening the cord and contraction of the uterus. | To facilitate delivery of the placenta. |

5. Once signs of separation are seen, perform controlled cord traction (CCT).

One hand is placed with the palm facing towards the umbilicus, the thumb on one side of the midline and fingers on the other, exerting pressure in an upward direction. The other hand firmly grasps the cord applying traction in a downward and backward direction following the line of the birth canal. Jerky movements and force should be avoided. If the first attempt at CCT fails it can be attempted in 2 to 3 minutes with a contraction. When the placenta is visible at the vulva, traction is exerted in an upward

direction.
The placenta can be cupped in the hands, and a gentle upward and downward movement or twisting action used to coax out the membranes. Artery forceps could be

action used to coax out the membranes. Artery forceps could be applied. This process should not be hurried.

6. If physiological third stage is requested a risk assessment should be undertaken at this stage by the midwife to ensure that no risks are identified

No oxytocic drug is given, and the cord should not be clamped until the cord has stopped pulsating.
The placenta and membranes are delivered by maternal effort the cord should **NOT** be pulled or the uterus palpated

Advise a change from physiological management to active management if either of the following occur: haemorrhage, or the placenta is not delivered within 1 hour of the birth of the baby, or the woman wishes to shorten the third stage

To exert counter-traction.

To complete the action as one smooth, continuous controlled movement.

To follow the curve of the birth canal.

To ease pressure on friable membranes. To increase the chances of delivering the membranes intact.

To decrease the risk of haemorrhage or partial separation of the placenta.

To support the woman to deliver the placenta by maternal effort only and wait for signs of separation.

In these situations, active management is appropriate and recommended.

| 7. | Following delivery of the placenta. Check that the uterus is well contracted and blood loss is not excessive. | To monitor for postpartum haemorrhage. |
|-----|--|--|
| 8. | Inspect the perineum and vulva. | To identify the presence of laceration/ trauma. |
| 9. | The vulva and perineum are gently cleaned with cleaned with water. Soiled linen is removed, and the woman made comfortable and warm. | To reduce the risk of infection. To promote the woman's comfort. |
| 10. | Repair any laceration or episiotomy as soon as possible. See perineal repair Guideline Obs 4. | To reduce anxiety and assist with the comfort of the woman. |
| 11. | The baby should be given to the woman to have skin to skin unless the woman declines | To promote the bonding process. |
| 12. | The placenta and membranes should be carefully examined. Appropriate documentation should then be completed. If the placenta and membranes are not complete, the obstetric registrar should be informed, and the woman | To assess their completeness. To maintain Rule 42 of the N.M.C. Midwives Rules and code of practice Risk of postpartum haemorrhage and endometritis. |
| | transferred to obstetric led care | |
| 13. | Within one hour following delivery, the blood pressure, temperature and pulse palpation of the uterus and observation of the blood loss should be assessed and recorded in the labour and delivery record. Along with an assessment of the emotional/physiological response to labour and birth. | To assess maternal physical and emotional condition following labour and delivery. Complete documentation, prior to transfer to Maternity ward |

14. In the community IM syntometrine 1ml will be given at delivery if the woman chooses active management of the third stage.

If blood loss is more than would be expected and especially if the uterus is not well contracted a second dose of IM Syntometrine 1 ml may be given with consideration to arranging a transfer into hospital.

In hospital the guideline for management of post partum haemorrhage (Obs 9) should be followed. Women having home births who have postpartum haemorrhage despite first dose of syntometrine should have an early transfer to hospital for further assessment and management.

Immediate care of the newborn

Introduction

A healthy baby will be born blue but have good tone and will cry within a few seconds of delivery and have a good heart rate within a few minutes of birth (Resuscitation council NLS guidelines 2015)

Each newborn infant should be assessed individually at birth.

When caring for the baby it is the midwife's responsibility to ensure that the baby is made comfortable, fed, and that facilities are available to allow the parents time to form an attachment to their baby.

It is also important to reduce the risk of

- Airway Obstruction
- Hypothermia
- Hypoglycaemia
- Infection
- Injury or accident (Myles 2003)

Preparation prior to delivery

| | Action | Rationale |
|----|---|---|
| 1. | Resuscitation equipment should be available at all deliveries. | To prepare a suitable and safe environment for the delivery of the baby |
| | Community | |
| | This should be checked daily and recorded on the check sheet (Appendix 2) | |
| | Hospital | |
| | Surface checks should be performed daily and before every delivery. | |
| | Below surface checks should be made daily and after each use and recorded (Appendices 3 and 4) | |
| 2. | There should be an adequate room temperature and the room to be free from draughts; (temperature is maintained at 18 – 21°C.) | Babies are born small and wet; they get cold very easily especially if they remain wet and in a draught (NLS 2010). |
| | Warm towels and clothes should be available. | |

| 3. | It is advised that doors and windows are closed prior to delivery. | To help maintain room temperature and maintain privacy. |
|----|--|--|
| 4. | The second midwife should be IN ATTENDANCE in adequate time to prepare, and care for the newborn. | To facilitate the optimum care and ensure that appropriate action is taken in time for delivery. |
| | She should be introduced to the parents. | |
| 5. | A quick summary of events, wishes or needs identified which should include whether the parents wish the baby to have Vitamin K following delivery. | Vitamin K is available and checked, according to patient group directive (PGD). See Guideline Obs 64 |
| | Any special circumstances i.e. | |
| | Pre-term labour | |
| | Small for dates | |
| | Problems during labour. | |
| | If there is a requirement for the Paediatrician to be present at delivery. | To reduce the likelihood of any |
| | Ensure that the parents are aware and understand any expected events anticipated following delivery. | misunderstanding by giving appropriate information and support to parents and help to alleviate anxiety. |
| 6. | Discuss the importance of drying baby as soon as possible. | To help maintain the temperature of the baby and reduce the risk of the baby developing hypothermia. |
| | | See Guideline Obs 74 for signs and symptoms of Hypothermia. |
| | Discuss the advantages of skin- to-skin contact following drying | To assist in the baby adapting to their new environment. |
| 7. | Help to create a quiet relaxed atmosphere sensitive to events. | This will enable the parents to remain empowered, calm and relaxed. |

8. Care at Delivery

Following the birth of the baby it is important to evaluate the condition of the baby specifically the respiration, heart rate and tone. This is usually undertaken simultaneously whilst covering and drying the baby with a dry warm towel.

In order to determine if resuscitation is required (NLS 2010).

Once dried the baby can be placed on the mother's upper abdomen and covered over, with a dry warm soft towel, to allow skin to skin contact. The head should either be covered or a hat put on.

To maintain the baby's body temperature and reduce the risk of hypothermia. To promote effective breast feeding.

9. **APGARS**

The Apgar score is recorded routinely at **1** and **5** minutes for all births (NICE 2014)

Apgars should be estimated on all infants and agreed between midwife/midwife or midwife/doctor (if present) and documented on the infant record page in the Intrapartum records as soon as possible.

Record the time that regular respirations are established.

If the baby is born in poor condition based on abnormal breathing, heart rate and tone, then the recommendations for neonatal life support should be followed.

For guidance on newborn life support see Appendix 5

In these circumstances the cord should be double clamped to allow paired cord blood gases to be taken. The Apgar score should continue to be recorded until the baby's condition is stable.

To determine the condition of baby at 1minute/5 minutes and 10 minutes following birth and assess if resuscitation is required.

To give an accurate record of events and to ensure that documentation is available.

To help prevent conflict between professionals.

For documentation purposes and establish the time of regular respirations.

In order to safely and effectively resuscitate the baby using current Resuscitation Council guidelines for NLS (2010)

These babies need careful observation and cord blood gases will help to establish whether the low Apgars are related to hypoxia.

10. Should the baby require any resuscitation it is important to talk to and offer support to the mother and her birth companions Separation of the mother and baby should be minimised considering the clinical circumstances

To reassure and support them when they will be naturally anxious.

To reduce anxiety and promote 'bonding'.

11. Name Bands

Band 1

Will have the mother's full name and district number, this will be printed on admission of the mother in labour

Band 2.

Will be handwritten with baby's name, date of birth, time of birth.

Both bands have to be checked by the parents and the Midwife in charge of delivery, before attaching them to baby's ankles They should both be fastened securely, but not too tight

A printed name band will be generated when the delivery notes have been inputted and an NHS and unit number generated for the baby.

This band will replace the handwritten band 2 when transferring the mother and baby to the maternity ward

Both surnames should always be the same and should correspond to the surname on the mother's case notes.

This should be fully explained to the parents.

Documentation is to be completed on the back of the Intrapartum record.

To ensure and verify that correct information is written for identification and security purposes, throughout the hospital stay.

To match up written documentation and mother's notes.

To prevent the labels coming off

To maintain correct records and ensure Trust Policy is followed

| 12. | Encourage initiation of breastfeeding as soon as possible after birth ideally within 1 hour. Or artificial feed in skin to skin contact if this is the chosen feeding method. | To reduce infant mortality and ill health the WHO recommendation is to initiate breastfeeding within 1 hour of birth. The baby will be alert and keen to feed. Early feeding is beneficial following delivery and should be encouraged as the blood glucose falls rapidly following delivery especially if the baby has been allowed to become cold. Energy has been used up to help the baby to maintain its temperature |
|-----|---|---|
| 13. | Blood Glucose estimation may be necessary if there are : | To prevent hypoglycaemia (See Hypoglycaemia guideline Obs 119) |
| | Signs of hypothermia | To determine blood glucose is not below |
| | Small for gestational age (<2nd percentile or clinically wasted) | 2.0 mmols. These situations are associated with a |
| | Pre-term baby (<u><</u>37weeks gestation) | tendency towards hypoglycaemia |
| | Maternal Diabetes. | |
| | • Sepsis | |
| | Severe intrapartum asphyxia. | |
| | Maternal use of Beta Blockers | |
| | Any newborn with symptoms suggestive of hypoglycaemia (see guideline Obs 119) | |
| | If blood glucose low promote early feeding. | Early feeding may prevent any further deterioration. |
| 14. | Related guidelines | |
| | Obs 119 Care and Management of the Hypoglycaemic infant. | |
| | Obs 74 Prevention of hypothermic infant | |
| | Obs 90 Care of newborn with meconium at delivery | |
| | Obs 64 Administration of Vitamin K to babies | |
| | Obs 47 Prevention of early onset Group B Streptococcal neonatal disease | |
| | Obs 45 Management of substance misuse in pregnancy | |

Safety considerations (skin to skin)

Vigilance of the baby's well-being is a fundamental part of postnatal care immediately following and in the first few hours after birth. For this reason, normal observations of the baby's temperature, breathing, colour and tone should continue throughout the period of skin-to-skin contact in the same way as would occur if the baby were in a cot (this includes calculation of the Apgar score at 1, 5 and 10 minutes following birth). Care should always be taken to ensure that the baby is kept warm. Observations should also be made of the mother, with prompt removal of the baby if the health of either gives rise to concern.

 Staff should have a conversation with the mother and her companion about the importance of recognising changes in the baby's colour or tone and the need to alert staff immediately if they are concerned.

It is important to ensure that the baby cannot fall on to the floor or become trapped in bedding or by the mother's body. Mothers should be encouraged to be in a semi-recumbent position to hold and feed their baby. Particular care should be taken with the position of the baby, ensuring the head is supported so the infant's airway does not become obstructed.

Notes - Mothers

- Observations of the mother's vital signs and level of consciousness should be continued throughout the period of skin to skin contact. Mothers may be very tired following birth and so may need constant support and supervision to observe changes in their baby's condition or to reposition their baby when needed
- Many mothers can continue to hold their baby in skin to skin contact during perineal suturing, providing they have adequate pain relief. However, a mother who is in pain may not be able to hold her baby safely. Babies should not be in skin to skin contact with their mothers when they are receiving Entonox or other analgesics that impact consciousness.

Notes – Babies

All babies should be routinely monitored whilst in skin to skin contact with mother or father. Observation to include:

- Checking that the baby's position is such that a clear airway is maintained –
 observe respiratory rate and chest movement. Listen for unusual breathing sounds
 or absence of noise from the baby
- Colour the baby should be assessed by looking at the whole of the baby's body as the limbs can often be discoloured first. Subtle changes to colour indicate changes in the baby's condition
- Tone the baby should have a good tone and not be limp or unresponsive
- Temperature ensure the baby is kept warm during skin contact.

Always listen to parents and respond immediately to any concerns raised

References

- 1. Local audit on Postpartum haemorrhage June 2016
- 2. NICE 2014 Clinical Guideline CG190. Intrapartum Care. Care of healthy women and their babies during childbirth.
- 3. The Code (NMC 2018): Professional standards and behaviour for Nurses and Midwives https://www.nmc.org.uk/standards/code/
- 4. Vain NE, Satragno DS, Gorenstein AN, Gordillo JE, Berazategul JP, Alda MG and Prudent LM. 2014. Effect of gravity on volume of placental transfusion: a multicentre, randomised, non-inferiority trial. Lancet 384: 235-240
- 5. Myles, M (2003). Textbook for Midwives, Churchill/Livingston 14th Edition.
- 6. Neonatal Life Support 2021, Resuscitation Council U.K. Publication Newborn resuscitation and support of transition of infants at birth Guidelines | Resuscitation Council UK
- 7. WHO The Baby Friendly Initiative; http://www.unicef.org.uk/babyfriendly/

Process for audit

 An audit will be undertaken at least every 3 years which will audit compliance with this guideline. The audit will include as a minimum set of standards the following criteria

Maternal

- maternal observations to be carried out on admission.
- maternal observations to be carried out during established first stage of labour
- maternal observations to be carried out during second stage of labour
- documentation of all of the above maternal observations

Neonatal

- Management of the newborn with meconium-stained liquor present at delivery
- Management of the newborn where there is known Group B haemolytic streptococcus present in either the mother or newborn.
- The audit will be presented at a monthly departmental multidisciplinary audit meeting following which an action plan will be formulated to correct any deficiencies identified and a date for re-audit planned.
- The implementation of the action plan will be reviewed at the monthly audit meeting 3 months after presentation

Appendix 1

Intrapartum skin care assessments

| Name: | Hospital No: |
|-------|--------------|
| | |

- 1. Complete in conjunction with Intra partum Risk assessment if intra partum score is 10+
- Add scores together and insert total score.
 If total score is 10+ initiate SKIN bundle care pathway.

| | | Time | | | | | | | | | |
|--------------------------|------------------------------------|------|---|----|--|---|----------|---|--|--|--|
| Gender | T | 1 | | | | | | | | | |
| Gender | Female | 2 | 1 | | | | | | | | |
| | | | | | | | | | | | |
| | 14 - 49 | 1 | | | | | | | | | |
| Age | | 2 | | | | | | | | | |
| | | 3 | | | | | | | | | |
| | | 4 | | | | | | | | | |
| | | 5 | | | | | | | | | |
| | Average BMI 20 – 24.9 | 0 | | | | | | | | | |
| Build | Above average BMI 25 – 29.9 | 1 | | | | | | | | | |
| | Obese BMI > 30 | 2 | | | | | | | | | |
| | Below average BMI < 20 | 3 | | | | | | | | | |
| | Healthy | 0 | | | | | | | | | |
| VISUAL ASSESSMENT OF | Thin and fragile | 1 | | | | | | | | | |
| AT RISK SKIN AREA | Dry | 1 | | | | | | | | | |
| (May select one | Oedematous | 1 | | | | | | | | | |
| or more options) | Clammy (Temp 个) | 1 | | | | | | | | | |
| | Previous pressure sore or scarring | 2 | | | | | | | | | |
| | Discoloured Grade 1 | 2 | | | | | | | | | |
| | Broken Grade 2 - 4 | 3 | | | | | | | | | |
| | Fully | 0 | | | | | | | | | |
| MOBILITY | Restless / fidgety | 1 | - | | | | | | | | |
| (Select one option | Apathetic | 2 | | | | | | | | | |
| ONLY) | Restricted / Bed bound | 3 | | | | | | | | | |
| | Inert (due to ↓consciousness) | 4 | 1 | | | | | | | | |
| | Chair or Wheelchair bound | 5 | 1 | | | | | | | | |
| | Continent/catheterised | 0 | | | | | | | | | |
| CONTINENCE | Occasional incontinence | 1 | 1 | | | | | | | | |
| (select one option ONLY) | Incontinent of Urine | 2 | 1 | | | | | | | | |
| | Incontinent of Faeces | 2 | 1 | | | | | | | | |
| | Doubly incontinent | 3 | 1 | E. | | | Ţ. | | | | |
| | | | 1 | 1 | | l | <u> </u> | l | | | |

| | Terminal Cachexia | | 8 | | | | | | | | | | | | | |
|-----------------------------|-----------------------|---------------------|----|-------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Tissue Malnutrition | Multi Organ Failure | | 8 | | | | | | | | | | | | | |
| (select one or | Single Organ Failure | | | | | | | | | | | | | | | |
| more options) | (Respiratory/Renal/Ca | ardiac) | 5 | | | | | | | | | | | | | |
| | Peripheral Vascular D | isease | 5 | | | | | | | | | | | | | |
| | Anaemia HB < 8 | | 2 | | | | | | | | | | | | | |
| | Smoking | | 1 | | | | | | | | | | | | | |
| Appetite | Average | | 0 | | | | | | | | | | | | | |
| (select one option) | Poor | | 1 | | | | | | | | | | | | | |
| | Fluids only | | 2 | | | | | | | | | | | | | |
| · | Anorexic | | 3 | | | | | | | | | | | | | |
| | NBM | | 3 | | | | | | | | | | | | | |
| Neurological | Diabetes, CVA, MS, M | lotor/Sensory | | | | | | | | | | | | | | |
| Deficit | Paraplegia, Epidural | | 4- | | | | | | | | | | | | | |
| (score depends | | | 6 | | | | | | | | | | | | | |
| on severity | | | | | | | | | | | | | | | | |
| Major Surgery Trauma | Above waist | | 2 | | | | | | | | | | | | | |
| (up to 48 hours | below waist, OR spina | al > | 5 | | | | | | | | | | | | | |
| post surgery) | 2 hours on theatre ta | ble | 5 | | | | | | | | | | | | | |
| | 6 hours on theatre ta | ble | 8 | | | | | | | | | | | | | |
| MEDICATION | Cytotoxics high dose/ | long term steroids | 4 | | | | | | | | | | | | | |
| | Anti-inflammatory | | | | | | | | | | | | | | | |
| 10+ At Risk | | TOTAL SCORE | | | | | | | | | | | | | | |
| 15+ High Risk | | Midwife Initials | | | | | | | | | | | | | | |
| 20+Very High Risk | | Special Risk Areas. | | | | | | | | | | | | | | |
| Mattress type | | | | | | | | | | | | | | | | |
| (Enter name of | | | | | | | | | | | | | | | | |
| pressure | | | | Modified Waterlow Score Chart | | | | | | | | | | | | |
| relieving mattress used) | | | | | | | | | | | | | | | | |
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Adapted from Waterlow Risk Score (Waterlow 2005)



Patient Name

Intrapartum Skin Care Risk Assessment Chart

| Commencement Date: | | | | | | | | | | | |
|---|---------|----------|-------|-------|----------|---|--|---|---|---|---|
| Moisture | | | | | | | | | | | |
| ROM - Liquor: | | | | | | | | | | | |
| Clear | 1 | | | | | | | | | | |
| Stained | 2 | | | | | | | | | | |
| Meconium | 2 | | | | | | | | | | |
| Mobility | | | | | | | | | | | |
| Reluctant to mobilise | 2 | | | | | | | | | | |
| Restricted, e.g. monitoring and other equipment | 3 | | | | | | | | | | |
| Bed bound, chair bound, theatre, lithotomy, instrumental delivery | 5 | | | | | | | | | | |
| Build | | | | | | | | | | | |
| BMI>30 | 2 | | | | | | | | | | |
| >41 | 3 | | | | | | | | | | |
| <20 | 3 | | | | | | | | | | |
| 20-30 | 0 | | | | | | | | | | |
| Appetite | | | | | | | | | | | |
| Poor during whole pregnancy or last month | 1 | | | | | | | | | | |
| No food for last 12 hours | 1 | | | | | | | | | | |
| Fluids only | 2 | | | | | | | | | | |
| Anorexia | 2 | | | | | | | | | | |
| Risk Area: Visual Skin Type | | | | | | | | | | | |
| Healthy | 0 | | | | | | | | | | |
| Tissue Paper | 1 | | | | | | | | | | |
| Dry | 1 | | | | | | | | | | |
| Oedematous | 1 | _ | | | | | | | | | |
| Clammy/Pyrexial | 1 | \vdash | | | | | | | | | |
| Maceration post Birthing Pool | 2 | _ | | | | | | | | | |
| Discoloured - Grade 1 damage | 2 | | | | | | | | | | |
| Broken Areas Grade2-4 | 3 | _ | | | | | | | | | |
| Special Risks | | | | | | | | | | | |
| Surgery/Bed Rest | + | | | | | | | _ | | _ | - |
| Epidural/Spinal | | | | | | | | | | | |
| <2 hours | 4 | | | | | | | | | | |
| 2-4 hours | 5 | | | | | | | | | | |
| >4 hours | 6 | | | | | | | | | | |
| * Scores can be discounted after 6 hours provided | | is rec | overi | ng nc | rma | v | | 1 | | | |
| Neurological Deficit | Julient | | OTEIL | - B | 11111111 | _ | | | | | |
| CVA,MS | 4-6 | | | | | | | | | | |
| Paraplegia | 4-6 | | | | | | | | | | |
| Motor/Sensory Deficit - (epidural scored seperately) | 4-6 | | | | | | | | | | |
| Diabetes | 40 | | | | | | | | | | |
| Gestational - diet controlled | 1 | | | | | | | | _ | | |
| Gestational - insulin controlled | 2 | | | | | | | | | | |
| Pre-existing - score according to level of control | 4-6 | | | | | | | | | | |
| Tissue Malnuturition | 4-0 | | | | | | | | | | |
| Smoking | 1 | | | | | | | | | | |
| Anaemia - Hb<8 | 2 | | | | | | | | | | |
| Single organ failure (e.g. Renal, Cardiac, severe PIH) | 5 | | | | | | | | | | |
| Multiple organ failure (severe Pre-eclampsia) | 8 | | | | | | | | | | |
| | 0 | | | | | | | | | | |
| Total (10+ At Risk 15+ 20+ Very High Risk) | | | | | | | | | | | |
| Time | | | | | | | | | | | |
| Signature | | | | | | | | | | | |

Patients 'At Risk' should be repositioned to assess skin and be re-scored hourly
 Wet pads should be replaced at the earliest opportunity

Patients 'Highly at Risk' should be repositioned, receive skin care and re-scored hourly

Low Risk >10 High Risk >10 - 14 Very High Risk 15-20+

Appendices 2,3,4

Resuscitaire check lists hospital and community

| MONTH | |
|-------------|--|
| <u>TEAM</u> | |

Community Midwifery Resuscitation Equipment

| 31 | | | | | | | |
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| 1 | | | | | | | |
| | Suction | Entonox | Drugs Checked and In Date | Bag Stocked | Bag, Mask and Airways | Comments | Midwife Signature |

Resuscitaire Checklist

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| | | Overhead heater and light | | | Yankauer and suction tubing | Oxygen T-connector and | | | adc | Check air and oxygen cylinder | | WEEKLY or after use (Equipment below working surface) | | | Laryngoscope with blade | Cord clamp and scissors | Guedel airways sizes 0,00,000 | | |
| | | ter a | | | suct | necto | | | Neonatal stethoscope | oxyg | Midwife Signature | er us | Face masks size 0,1 | | with | d sci | 's siz | | |
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Neonatal Resus Trolley

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| Date | Cord clamps | Cord scissors | Hats | Plastic bags | Ventilator circuits | Neonate mask 0 x3 | Infant mask 1 x3 | Infant mask 0 x3 | Tracheal Tube 2.0 x3 | Tracheal Tube 2.5 x3 | Tracheal Tube 3.0 x3 | Tracheal Tube 3.5 x3 | Tracheal Introducer x3 | Laryngoscope size 0 & | 00 | ET tape and ribbon | Guedel Airway size | 0,00,000 | Suction tubing | Yankauer Sucker x2 | Needles/Syringes | selection | UVC kit | Signature |

Appendix 5

NLS algorithm

AT ALL TIMES ASK **"IS HELP NEEDED**"

Newborn life support

(Antenatal counselling)

Team briefing and equipment check

Preterm < 32 weeks

Place undried in plastic wrap + radiant heat

Inspired oxygen

28-31 weeks 21-30% < 28 weeks 30%

If giving inflations, start with 25 cm H₂O

| Acceptable pre-ductal SpO ₂ | | | | | | | | | | |
|---|-----|--|--|--|--|--|--|--|--|--|
| 2 min | 65% | | | | | | | | | |
| 5 min | 85% | | | | | | | | | |
| 10 min | 90% | | | | | | | | | |

TITRATE OXYGEN TO ACHIEVE TARGET SATURATIONS

Birth

Delay cord clamping if possible

Start clock / note time Dry / wrap, stimulate, keep warm

Colour, tone, breathing, heart rate

Ensure an open airway Preterm: consider CPAP

If gasping / not breathing

- Give 5 inflations (30 cm H₂O) start in air
- Apply PEEP 5-6 cm H₂0, if possible
- Apply SpO₂ +/- ECG

Reassess

If no increase in heart rate, look for chest movement

If the chest is not moving

- Check mask, head and jaw position
- 2 person support
- Consider suction, laryngeal mask/tracheal tube
- Repeat inflation breaths
- Consider increasing the inflation pressure

Reassess

If no increase in heart rate, look for chest movement

Once chest is moving continue ventilation breaths

If heart rate is not detectable or < 60 min-1 after 30 seconds of ventilation

- Synchronise 3 chest compressions to 1 ventilation
- Increase oxygen to 100%
- Consider intubation if not already done or laryngeal mask if not possible

Reassess heart rate and chest movement every 30 seconds

If the heart rate remains not detectable or < 60 min⁻¹

- · Vascular access and drugs
- Consider other factors e.g. pneumothorax, hypovolaemia, congenital abormality

Update parents and debrief team Complete records

APPROX 60 SECONDS

Appendix 6

Fluid replacement during and after pregnancy and birth



Wrightington, Wigan and Leigh Teaching Hospitals

NHS Foundation Trust

Fluid replacement during and after pregnancy and birth – advice and guidance

- During pregnancy and labour be careful about advising women to "drink more" for nonspecific symptoms such as headache or fatigue. Advise women to avoid dehydration, drink to thirst and reassure them that yellow urine is normal, not harmful and does not need specific treatment. -
- Overall fluid maintenance 1 Recommended fluid background maintenance during labour and birth is 20-30mls/kg /24 hours i.e. 3000mls max for most women (total IV or oral) (use booking weight until birth and then current weight if possible). ď
- Overall fluid maintenance 2 Restrain fluid intake if more than 3000mls oral taken in any 24 hours in "labour". က
- **Maintenance fluids** if required give as **1000mls over 8-12hours** (usually Hartmann's solution) 4
- Additional fluid replacement Balance any excessive outputs (vomiting or other loss) with specific measured bolus replacement. S
- Additional fluid boluses If required, use a bolus of 200-300mls then clinical review before further fluids are administered. Ö
- Fluid prescription Prescribe fluids in 1 consistent place, during and after birth, LW and theatre. Use IV Fluids paper chart.
- Electronic fetal monitoring / Fetal concerns Do NOT use fluid bolus, oral or IV, for fetal concerns unless there is associated hypotension. ω.
- Ketonuria Do NOT use fluid boluses, oral or IV fluids for isolated ketonuria. Review dietary intake. <u>.</u>
- Urine output 1- Checking urine output in labour rarely indicated. If done, review 4 hourly (not hourly, unless there are specific major concerns). Record consistently on MEOWS chart, during and after birth, LW and theatre. 9
- 11. Urine output 2 Do NOT use fluid boluses for limited urine output in labour unless specific other problems and only after senior medical advice.
- 12. Charting and recording 1 Women requiring any IV fluids in labour should have all fluids (IV and oral) and urine output charted on the paper IV fluid
- 13. Charting and recording 2 Women managing with oral hydration do not require specific fluid charting but should be advised not to drink excessively (as outlined above)
- suspect hypovolaemia or dehydration, a preload is NOT necessary. Treat maternal hypotension accordingly with fluids +/-ephedrine. If there are fetal concerns associated with establishment of epidural block then fluid/ephedrine should be considered even in the absence of maternal hypotension 14. Epidurals- Ensure patency of cannula and then commence Hartmann's solution at 125ml/hr If there is haemodynamic stability and no reason to