Meconium Stained Liquor guideline (GL877)

Approval

<table>
<thead>
<tr>
<th>Approval Group</th>
<th>Job Title, Chair of Committee</th>
<th>Date</th>
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<tbody>
<tr>
<td>Maternity &amp; Children’s Services Clinical Governance Committee</td>
<td>Mr Mark Selinger, Consultant Obstetrician</td>
<td>3rd November 2017</td>
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Change History

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Author, job title</th>
<th>Reason</th>
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<tbody>
<tr>
<td>1.0</td>
<td>2004</td>
<td>Miss B Dunbar, Miss A Weavers &amp; Miss P Street</td>
<td>Trust requirement</td>
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<tr>
<td>2.0</td>
<td>Nov 2007</td>
<td>B Romaine (Practice Dev M/Wife), Ms A Weavers (Consultant M/wife) &amp; Miss P Street (Consultant Obstetrician), Dr G Boden (Neonatologist)</td>
<td>Reviewed</td>
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<td>3.0</td>
<td>Jan 2011</td>
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<td>3.1</td>
<td>Nov 2011</td>
<td>B Romaine (Practice Dev M/Wife), Ms A Weavers (Consultant M/wife) &amp; Miss P Street (Consultant Obstetrician)</td>
<td>Auditable standards added</td>
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<td>B Romaine (Practice Dev M/Wife), Ms A Weavers (Consultant M/wife) &amp; Miss P Street (Consultant Obstetrician)</td>
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<td>Louise Randall (Student Consultant MW)</td>
<td>Updated against NICE guidelines CG190.</td>
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<tr>
<td>5.0</td>
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<td>C Harding (Consultant MW)</td>
<td>Reviewed against NICE guidance &amp; in consultation with medical staff</td>
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**Overview:** The passage of Meconium is rarely a sign of significant fetal hypoxia/acidosis. Meconium in the presence of a suspicious or abnormal FHR pattern needs further investigation e.g. FBS.

Meconium aspiration syndrome occurs in 1.3 out of every 1000 live born infants and may be more likely to be associated with the hypoxic fetus/infant. It is more common in the post term fetus and is rare in preterm infants.

This guideline refers to significant meconium which is defined as dark green or black amniotic fluid that is thick or tenacious, or any meconium-stained amniotic fluid containing lumps of meconium. (NICE 2014\(^{(1)}\))

Thin meconium staining of the liquor suggests good liquor volume which causes dilution of the previously passed meconium. This is unlikely to be significant however the whole clinical picture should be considered in making a decision as to whether it is a significant finding or not.

**If at home** transfer the woman to the Delivery Suite for continuous electronic fetal monitoring. If birth is imminent, the aim is to safely manage the situation in the home. At all times consult with the mother and involve her in any decisions

- Continue to monitor fetal heart with intermittent auscultation throughout
- Accurate record keeping (NMC, 2015\(^{(2)}\))

**If unable to transfer to Delivery Suite from home**

Call second midwife for birth and prepare for neonatal resuscitation

Any abnormality, summon paramedic assistance in case of possible transfer post delivery and inform Delivery Suite.

**If not transferred to Delivery Suite from Rushey because birth is imminent**

Call second midwife and Paediatrician for birth and prepare for the possibility of neonatal resuscitation. Take paired cord blood gasses.

**Meconium Stained Liquor on the Delivery Suite**

- Inform Obstetric medical staff of diagnosis
- Commence continuous CTG monitoring (NICE, 2014\(^{(1)}\)). If ‘pea soup’ consider discussion with Consultant on call.
- Summon Paediatric assistance for birth, prepare for neonatal resuscitation
- Take paired cord blood gasses
Assessment of baby's condition at birth in all situations

- If baby is breathing do not attempt to suction. Assess condition.
- If the baby is floppy and unresponsive at delivery, perform suction under direct vision prior to delivering inflation breaths. Do not delay further resuscitation by prolonged inspection of the airway.
- If personnel present at delivery not trained to undertake suction under direct vision of cords, continue with airway opening techniques and inflation breaths.
- Parents of baby should be given advice about signs of respiratory distress.

At a home birth in addition to above statements

- If baby not responsive to resuscitation, summon paramedic assistance.
- If Apgar <7 at 5 min or the baby has required inflation/ventilation breaths at birth. transfer to hospital by ambulance and seek paediatric advice
- If the baby is born in good condition and is to remain at home observe for signs of respiratory distress ½ to 1 hourly post delivery and arrange a review later (within 12 hours)

On leaving the home inform parents of signs of respiratory distress and give emergency contact telephone number.

On-going Assessment of baby's condition

Babies with any meconium-stained liquor present at delivery are required to have observations at 1 and 2 hours of age.

Those with significant meconium will require additional observations 2 hourly for 12 hours. These should continue for a further 12 hours if any findings are abnormal.

Meconium observations: Following the criteria on the RBHFT ‘Baby Observation Chart’ making records of respirations, tone, heart rate, colour, temperature, feeding. In all cases when observation values fall outside the shaded areas in the “Baby Observation Chart” the situation will be discussed with the midwife in charge and a member of the paediatric team.
Maternity Guidelines – Meconium Stained Liquor (GL877) November 2017

References
1. NICE (2014) Intrapartum care: Care of healthy women and their babies during childbirth. (CG190) www.nice.org.uk

Auditable Standards:
1. Continuous electronic fetal monitoring is initiated when significant meconium stained liquor is discovered. Exception: when meconium liquor is first discovered at delivery.
2. A healthcare professional trained in advanced neonatal life support (paediatrician, neonatal nurse practitioner or midwife trained on neonatal life support) will be present at all deliveries where meconium stained liquor has been noted.
3. All babies with history of thin-meconium stained liquor will have a set of observations done within one hour of birth and 2 hours after. This will be recorded in the “Baby Observation Chart” and filed in either maternal or neonatal health care record.
4. All babies with significant meconium stained liquor will have a set of observations done at birth, 2 hours and 2 hourly after for 12 hours, for a minimum of 12 hours. This will be recorded in the “Baby Observation Chart” and filed in either maternal or neonatal health care record.
5. In all cases when observation values fall outside the shaded areas in the “Baby Observation Chart” the situation will be discussed with the midwife in charge and a member of the paediatric team. This will be documented in the postnatal maternal health care record.