MECONIUM STAINED AMNIOTIC FLUID (MSAF) GUIDELINE

1. OPTIMAL OUTCOMES
   • Correct identification of MSAF to allow minimisation of fetal and maternal morbidity and mortality secondary to MSAF

2. PATIENT
   • Woman with meconium stained amniotic fluid at term
     o Light staining or thin meconium is yellow or light green and is watery
     o Significant meconium stained liquor is defined as dark green or black amniotic fluid that is thick or tenacious or any meconium stained liquor containing lumps of meconium

3. STAFF
   • Registered midwives
   • Student midwives
   • Medical staff
   • Neonatal Nurses

4. EQUIPMENT
   • Speculum
   • Light
   • Sanitary pads

5. CLINICAL PRACTICE
   • Perform midwifery admission
     o Maternal observations
     o Abdominal palpation and assessment of liquor volume
   • Confirm spontaneous rupture of membranes
   • Confirm if light or significant meconium staining of the liquor
   • Discuss with woman the significance of meconium stained liquor
   • Arrange medical admission for woman
   • Offer and recommend immediate induction of labour for woman as soon as possible where not in established labour
   • Perform a CTG
     o Where meconium staining is light and the CTG is reassuring and there are no other indications for monitoring, continuous EFM can be ceased
     o Where there is significant meconium staining or non-reassuring CTG, continuous EFM should be offered and recommended
   • Arrange an antenatal admission for woman not in established labour and declining induction of labour
   • Observe the liquor at frequent intervals throughout labour
   • Request paediatrician is present for birth
   • Observe the baby for signs of respiratory distress within the first 1-2 hours of birth and then every 4 hours for 24 hours

6. HAZARDS/SUB-OPTIMAL OUTCOMES
   • Meconium stained liquor not recognised
   • Induction of labour not offered and recommended
   • Inadvertent induction of labour in the absence of meconium stained liquor
   • Electronic fetal monitoring not offered
   • Increased risk of unnecessary obstetric intervention
   • Inadequate counselling

cont’d ..../2

Replaced ‘Management of Patients Presenting with Meconium Stained Liquor, not in established labour’
approved Quality Council 20/5/02
7. DOCUMENTATION
   - Integrated notes
   - Obstetrix

8. EDUCATIONAL NOTES
   - Incidence of MSAF at 42 weeks is 30%, at 40 weeks is 15% and at 37 weeks is 2-3%
   - MSAF occurs in 7%-20% of live births and has an association with fetal acidosis, abnormalities in fetal heart rate and low Apgar scores
   - Meconium stained amniotic fluid increases the maternal risk of endometritis and chorioamnionitis
   - MSAF can simply represent the maturation of fetal intestinal function particularly with advancing gestation
   - Meconium aspiration syndrome (MAS) occurs in approx 5% of infants born through MSAF and has a mortality rate of 4%, although these numbers appear to be declining
   - Light meconium stained liquor is associated with a 1% to 15% risk of MAS
   - There is no benefit from amnioinfusion, intrapartum oropharyngeal suctioning or post delivery endotracheal suctioning of the vigorous infant
   - If the baby has depressed vital signs laryngoscopy and suction under direct vision should be carried out by a health professional trained in advanced life support of the neonate
   - Meconium staining cannot be reliably graded

9. RELATED POLICIES/ PROCEDURES/CLINICAL GUIDELINES
   - Ruptured membranes at term – not in established labour
   - Care in first stage labour
   - Neonatal observations
   - Speculum examination
   - Neonatal resuscitation
   - Obesity in pregnancy

10. REFERENCES