Recommended pathway of birth setting for women in labour in the hospital or homebirth environment

NHS Greater Glasgow and Clyde

Midwife led, Intermittent Auscultation

- Aged 16-40 (inclusive) at booking
- Current BMI ≥18 - ≤ 35
- No history of significant maternal medical disease*
- ≤ Para 4
- No history of previous poor obstetric outcome*
- 37- 42 weeks pregnant
- Singleton, cephalic pregnancy
- Normal liquor volumes
- No suspected fetal growth restriction*
- Low PAPP-A with normal growth on USS within last 4 weeks
- HIV negative with HIV positive partner
- Haemoglobin ≥ 9g/l
- Platelets > 100 x10^9/l
- No history of antepartum haemorrhage in labour
- Clear liquor
- Ruptured membranes < 48 hours with no signs of infection
- Group B Strep positive (no contraindications to pool) or negative
- No history of reduced fetal movement within last 24 hours
- No signs of hypertonus (>5:10) or tachysytole
- Maternal heart rate ≤ 110 bpm on admission*
- No Maternal pyrexia *
- Blood pressure systolic <140mmHg and diastolic <90mmHg in labour*

*Refer to obstetric led pathway for further information

Midwife led (IA), following discussion

These women may be recommended AMU/CMU care following an individual risk assessment and informed discussion with senior medical staff.

- Aged <16 and > 40 at booking
- Current BMI 35-40 with good mobility and ability to auscultate fetal heart
- Tocophobia (excessive fear of childbirth)
- Quiescent Crohns disease or Ulcerative Colitis
- Spinal abnormalities with no mobility limitations
- Well controlled hypothyroidism
- Hyperthyroidism with no detectable TRAB
- Hep B antigen or Hep C positive with no liver disease
- HIV positive with viral load <50
- Female genital mutilation (FGM)
- Fibroids < 4cm
- Parity ≥ 5
- Previous 3rd and 4th degree tear
- Previous PPH/ manual removal of placenta
- Insignificant meconium
- IVF/ICSI in spontaneous labour
- Induction of labour for post dates (<42 weeks), PGP or maternal request with double balloon catheter
- Established labour following induction for post dates (<42 weeks), PGP or maternal request with ≤ 2 prostins. **Recommended CTG on admission to AMU for at least 20 minutes & if normal offer intermittent auscultation**
- Maternal request with risk factors. **Risks should be thoroughly discussed & accepted**

Obstetric led, Continuous external fetal monitoring (CTG)

- Significant maternal medical disease (e.g. cardiac disease with intrapartum complications, hypertension, autoimmune disorder, HIV with viral load >50, Hep B antigen/Hep C positive or liver disease with abnormal liver function, renal disease with abnormal renal function, current active chicken pox, rubella or genital herpes, seizures, haemoglobinopathies, diabetes, significant respiratory disease, blood disorders in women or unborn baby, toxoplasmosis or tuberculosis receiving current treatment, organ transplant, current or past malignancy, hyperthyroid with detectable TRAB)
- Previous caesarean birth
- Previous poor obstetric history (i.e. stillbirth with known recurrent cause or related to intrapartum difficulty, neonatal morbidity/ mortality)
- Gestation < 37 weeks or gestation > 42 weeks
- No antenatal care before 22 weeks
- Multiple pregnancy
- Pre-eclampsia, eclampsia, PIH requiring medication, gestational diabetes or obstetric cholestasis in this pregnancy
- High risk VTE in pregnancy, requiring thromboprophylaxis
- Significant drug or alcohol misuse in this pregnancy
- Fetal anomaly in this pregnancy
- Oligohydramnios or polyhydramnios
- Low PAPP-A with abnormal USS
- Abnormal umbilical artery Doppler indices
- Fetal growth restriction in this pregnancy (i.e. reduced growth velocity or <3rd centile or ≤10th centile with risk factors including abnormal Doppler measurements/reduced liquor/reduced growth velocity)
- Reduced fetal movements (2 episodes ≥ 28weeks/1 episode ≥37 weeks with ongoing fetal movement concerns or 2 episodes ≥ 37 weeks)
- History of recurrent antepartum haemorrhage or one episode ≥ 37 weeks
- Post dates or maternal request induction of labour with ≥3 prostins or any induction with risk factors
- Maternal heart rate >110 bpm on 2 occasions, 30 minutes apart
- Maternal temperature >38°C or ≥37.5°C on ≥ 2 occasions, 1 hour apart
- Suspected chorioamnionitis or sepsis
- Severe hypertension (single systolic reading ≥160mmHg and diastolic ≥110mmHg) or hypertension (Systolic ≥140mmHg and diastolic ≥90 mmHg on 2 consecutive readings taken 30 minutes apart) out with contractions
- Pain that differs from pain normally associated with contractions.
- Significant meconium (dark green/black amniotic fluid or any liquor containing lumps of meconium)
- Prolonged rupture of membranes >48 hours
- Oxytocin use
- Confirmed delay in 1st or 2nd stage of labour
- Regional analgesia
- Maternal request

Criteria for transfer from AMU/CMU to Obstetric Led Maternity Unit

If noted to have any of the following risk factors during AMU/CMU care, we should be recommending these women are transferred to obstetric led care and commenced on continuous electronic fetal monitoring following a discussion with the woman and her partner.

Maternal

- Suspected chorioamnionitis or sepsis or temperature ≥38^{o}C
- Fresh PV bleeding in labour (not show)
- Oxytocin use
- Severe hypertension (160/110mmhg) or Hypertension (Systolic ≥140mmHg and diastolic ≥90 mmHg on 2 consecutive readings taken 30 minutes apart)
- Maternal tachycardia >110bpm on two occasions, 30 minutes apart
- Maternal request
- Epidural analgesia
- Delay in 1st or 2nd Stage of labour despite ARM*

  * Primigravida: 1^{t} stage progress < 0.5cm/hour or 2nd stage > 3hours

  Multiparous: 1st stage progress < 0.5cm/ hour or a slowing in the progress of labour e.g. 3cm at 12.00, 7cm at 15.00, 9cm at 19.00. 2nd stage >2 hours

  Delay in descent and rotation of baby's head

  Change in strength, duration and frequency of uterine contractions * (NICE, 2014)

NOTE: amniotomy alone for suspected delay in established labour should not be regarded as an indication to commence continuous cardiotocography

Fetal

- Fetal heart rate abnormality
- Significant meconium
- Malpresentation is detected during labour

NOTE: If continuous CTG is commenced for concern arising from intermittent auscultation, women should have the cardiotocograph removed if the trace is normal for 20 minutes, unless the women requests to stay on continuous cardiotocography

Appendix 1

Please note this list is not exhaustive. If unsure please discuss with medical staff.

Autoimmune disorders	**Haemoglobinopathies**	**Significant Respiratory Disease**	**Blood Disorders**
Rheumatoid Arthritis	Sickle Cell Disease	Chronic Obstructive Pulmonary Disease (COPD)	Von Willebrand Disease
Systemic Lupus Erythematosus (SLE)	Beta Thalassaemia Major	Cystic Fibrosis	Thrombophilia including Factor V Leiden, Protein C and Protein S Deficiency
Inflammatory Bowel Disease (IBD)	Alpha Thalassaemia Major	Bronchitis	DVT or Pulmonary Embolism
Multiple Sclerosis	Beta Thalassaemia Minor	Pneumonia	Arterial Thrombosis
Type 1 Diabetes Mellitus	Alpha Thalassaemia Minor	Emphysema	Antiphospholipid antibody syndrome
Guillain-Barre Syndrome		Idiopathic Pulmonary Fibrosis (IPF)	Fibrinogen Disorders
Chronic Inflammatory demyelinating polyneuropathy		Asthma requiring increased treatment or hospital admission in this pregnancy	Atypical antibodies putting baby at risk of haemolytic disease (Anti-c, Anti-C, Anti- D, Anti- E, Anti-K, Anti-M)
Graves Disease			Haemophilia
Hashimoto's thyroiditis			Thrombotic Thrombocytopenic Purpura (TTP)
Myasthenia gravis			Rhesus isoimmunisation
Scleroderma			Factor XI deficiency
Vasculitis			
Immune Thrombocytopenia (ITP)			

References

- Health Improvement Scotland*, (2009) 'Keeping Childbirth Natural and Dynamic, Pathways for Maternity Care'.* [online] Available*:* Final KCND pathway[1].pdf
- NICE (2014) *'Intrapartum care for healthy women and babies: Clinical guideline'* [online] Updated 2017. Available: Recommendations | Intrapartum care for healthy women and babies | Guidance | NICE
- Nice (2022) '*Fetal Monitoring in Labour*' [online] Available: Recommendations | Fetal monitoring in labour | Guidance | NICE
- Greater Glasgow & Clyde (2019), *'Intrapartum Fetal Monitoring, Obstetrics'.* [online] Available*:* [CG] Intrapartum Fetal Monitoring (nhsggc.org.uk)
- The Scottish Government (2021), '*Birthplace decisions: Information for pregnant women and partners on planning where to give birth*'