CLINICAL PRACTICE GUIDELINE

Abnormalities of Lie / Presentation

This document should be read in conjunction with the **Disclaimer**

Contents

Breech presentation	2
Antenatal management	3
External cephalic version	4
Elective caesarean section	4
Undiagnosed breech presenting in labour	4
Diagnosed breech booked for caesarean presenting in labour	5
Criteria recommended for a planned vaginal breech term birth	5
Pre-term breech – Vaginal birth	5
External cephalic version quick reference guide (QRG)	6
Flow chart for external cephalic version	7
External cephalic version	8
Background information	8
Key points	8
Contra-indications to performing an ECV	8
Procedure	9
Breech presentation: Planned vaginal birth QRG	11
Breech labour and birth flowchart	13
Planned vaginal breech birth	14
Unstable lie at or near term	19
Antenatal management	19
Birth management options	20
Birth management for a woman in labour with an unstable lie	20
Rare presentations	21
References	21

Breech presentation

Background

Breech presentation occurs in 3% to 4% of pregnancies at term.¹ The randomised multicentre Term Breech Trial (TBT) showed that a planned elective caesarean section (ELUSCS) reduces the risk for adverse perinatal outcomes or serious maternal morbidity when compared to a planned vaginal breech birth in the short term.¹, ¹ Long term follow-up at 2 years has not found neonatal neurological outcomes or maternal outcomes differing between women who had an ELUSCS compared to vaginal breech birth.⁴, ⁵ A large study conducted in the Netherlands following the TBT study found that the rapid increase in caesarean section rates resulted in substantial improvements in perinatal outcomes leading to halving of perinatal mortality rates, and ever greater reductions in the incidence of perinatal birth trauma.², ⁶ However, the view remains that if the application of strict criteria before and during labour is met; planned vaginal birth of a singleton breech at term is a reasonable management option.¹, ९

External cephalic version (ECV) from 36 weeks has been shown to decrease the incidence of breech presentation at term and consequently reduce the ELUSCS rates.^{2, 10} It is seen as a safe procedure provided it is performed in a setting where caesarean section can be performed if necessary. A meta-analysis looking at risk for performing an ECV indicates that fetal death risk is 1 per 5000 procedures; pooled complications risk was 6.1%, and risk for requiring caesarean was 0.35%.¹¹ However, a large cohort study found that performing an ECV may carry a higher risk for caesarean section of 0.5%.^{1, 12}

A recent large multi-centre randomised study found that ECV initiated at 34-35 weeks gestation compared with 37 weeks or more increases the probability of cephalic presentation at birth, however it does not reduce rate of caesarean sections, and it may increase the risk rate for preterm birth.¹³

Key points

- 1. ELUSCS for a singleton breech at term has been shown to reduce perinatal or neonatal mortality rates and serious neonatal morbidity rate in the first 6 weeks of life.^{2, 7}
- 2. Long-term follow-up at 2 years showed neurological infant outcomes do not differ by planned mode of birth even in the presence of serious short term neonatal morbidity.²
- ELUSCS is not associated with substantially better or worst outcomes for women 2
 years after birth when compared to planned vaginal singleton breech birth at term.^{4, 5}
- 4. All women with a singleton breech presentation with no contra-indications to the procedure should be offered an ECV. Success rates for ECV are approximately 40% in nulliparous women and 60% in multipara women.³

- 5. A woman attending a low-risk midwifery antenatal clinic, and who is found to have a breech presentation at 35-36 weeks gestation shall be referred for obstetric medical review prior to 37 weeks gestation.
- 6. If breech diagnosis is made after 37 weeks, obstetric review / counselling is required, and an ultrasound should be performed to assess for fetal or maternal causes of the malpresentation, and fetal growth / wellbeing.¹
- 7. Careful case selection and labour management in a modern obstetric setting may achieve a level of safety similar to ELUSCS.² Planned vaginal singleton breech birth is an option for women who have **no maternal or fetal contra-indications** to this mode of birth. Women who meet the criteria for a planned vaginal breech birth who develop complications which are contraindications to a planned term breech birth, must be referred to the team consultant for review and counselling on the day. If after hours or the consultant is not available the woman must be referred to MFAU/Labour and Birth Suite, for review by the Senior Registrar.
- 8. The Consultant / Senior Registrar must have an informed discussion with the woman (and her support person if available) including options, recommendations and the possible outcomes.
- This conversation and the final decision should be clearly documented in the medical record by the medical officer with the appropriate level of seniority undertaking the counselling.
- 10. The mode of birth for preterm breech presentation is made based according to individual clinical situations, and the decision is made after discussion with the team Consultant and the woman.

Antenatal management

Breech presentation may require different options for management:

- ECV
- Elective caesarean section
- Planned breech vaginal birth
- Antenatally undiagnosed breech presentation presenting in labour
- 1. Refer women with a breech presentation between 35-36 weeks gestation for medical obstetric review as near as possible to 36 weeks gestation.
- 2. If there are no contra-indications the woman should be offered an ECV¹ between 36-37 weeks gestation. An ECV at 34-36 may be performed with Consultant approval and the woman should be advised of the risk for preterm birth associated with performing ECV at this gestation. ECV may be attempted after 37 weeks if the diagnosis is delayed, albeit with a lower success rate.
- 3. Prior to booking an ECV, explanation about the procedure shall be given including risks, side-effects, and outcomes. Note: An ECV is inappropriate if a caesarean is indicated for other reasons.¹

- 4. Ultrasound examination should be performed to assess presentation (type of breech, exclude hyperflexion of the head), placental location, amniotic fluid volume and to exclude any fetal and uterine anomalies.¹
- 5. The procedure is performed in the Maternal Fetal Assessment Unit (MFAU).
- 6. Depending on the maternal decision regarding mode of birth, obtain written consent¹⁴:
 - For a Non-Elective Caesarean on the MR295: 'Generic consent form' bearing in mind that it is not possible to confirm the nature of the uterine incision prior to commencement of surgery, especially in the setting of fetal malpresentation.
 - ECV on the MR 295.75: 'Consent form for External Cephalic Version'
 - See sections in this document: External Cephalic Version for detailed information about the procedure and contraindications.

External cephalic version

ECV for uncomplicated term breech presentation should be offered to nulliparous women from 36 weeks gestation and for multiparous women from 37 weeks gestation if there are no contra-indications to the procedure.

See:

 Sections in this document: External Cephalic Version for detailed information about the procedure and contraindications and ECV- MFAU – Quick Reference Guide.

Elective caesarean section

Caesarean section should be booked for women who elect this mode of birth.

A woman whose only indication for CS is breech presentation, should not be transferred to the theatre suite until the presentation has been confirmed with bedside ultrasound by a WNHS credentialed practitioner.

Undiagnosed breech presenting in labour

The decision regarding mode of birth will depend on gestation, stage of labour or imminent birth, maternal and fetal risks, and parental wishes after consultation with the obstetric team.¹ An intrapartum ultrasound should be performed if possible.¹ Following counselling and ensuring the criteria are met for a vaginal breech birth, a woman may choose this option of birth.¹ However, it should be stated here that a woman may choose her method of birth, regardless of risks.

If the diagnosis of breech presentation is made in advanced labour, the lack of opportunity to assess for contraindications for vaginal breech birth may increase the risk of adverse perinatal outcomes. However, this risk should be balanced against the risk of difficult caesarean section at advanced cervical dilatation when decisions regarding the appropriate mode of birth are made.

Diagnosed breech booked for caesarean presenting in labour

The management plan may be adjusted depending on the gestation, clinical situation and consultation with the woman and her obstetric team. Proceed to Caesarean section if breech presentation is verified, **only if** the woman confirms her request for this mode of birth.

Criteria recommended for a planned vaginal breech term birth

- The woman has completed a consent form after counselling regarding risks and outcomes of a breech birth compared to an elective caesarean section.¹
- Availability of a consultant obstetrician trained in breech delivery for the entire labour process, including arrangements for shift changes & fatigue.
- The woman should have a clinically adequate pelvis.¹⁻⁴
- Exclusion of a growth restricted fetus^{2, 3} or macrosomia^{2, 4, 5} Estimated fetal weight is between 2500g and 3800g^{3, 6}
- Exclusion of a footling or kneeling breech. The breech should be in the frank or complete breech position.¹
- The fetus has a flexed head^{1, 3}
- Immediate theatre facilities should be available for caesarean section if required, including skilled anaesthetic staff & neonatal resuscitation facilities.¹
- No previous caesarean section.
- No fetal anomaly incompatible with vaginal birth^{2, 3}
- Absence of fetal or maternal compromise
- Continuous fetal heart rate monitoring during labour.³
- Spontaneous onset of labour.

Note: For criteria and management of a vaginal breech birth see sections in this document: Breech – Vaginal Birth Management and Breech Vaginal Birth QRG

Pre-term breech – Vaginal birth

The mode of birth is decided by the woman and the Obstetric team following discussion based on individual circumstances.³

External cephalic version quick reference guide (QRG)

Medical and midwifery staff should be familiar with the contents of the full guideline.

Criteria for referral

A woman with a breech presentation ≥ 36 weeks gestation, who has been counselled about the procedure has a written maternal consent document in the medical records.

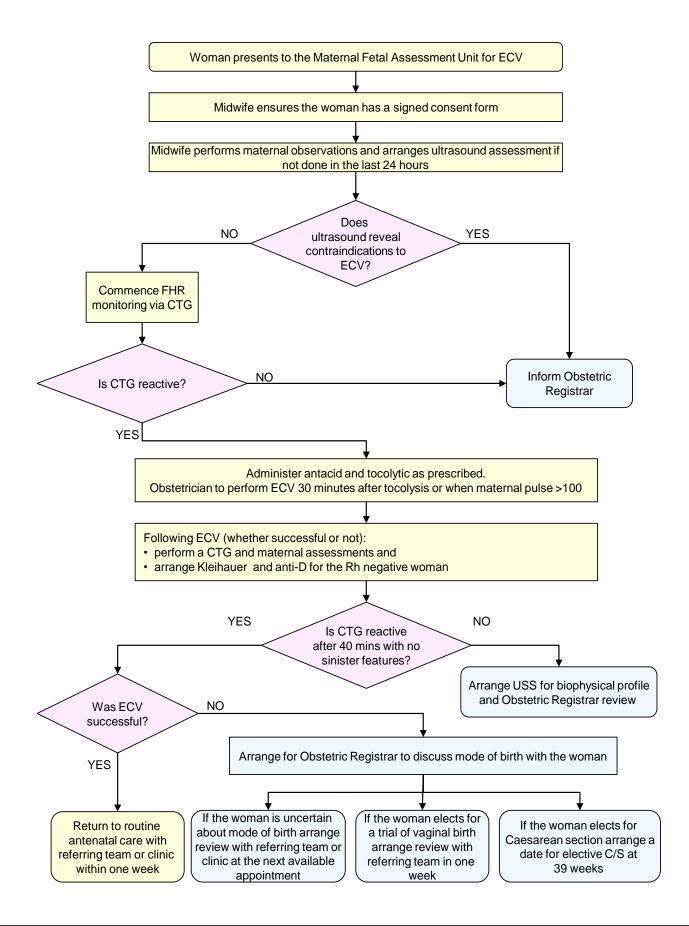
Prior to the procedure

- 1. Check a written consent is completed on the MR 295.75
- 2. Record maternal baseline observations for pulse, respirations and BP.
- 3. Perform a CTG for 20 minutes, or cease earlier if the CTG meets the definition of normal prior to 20 minutes.
- 4. Check a formal ultrasound has been performed within 24 hours of the procedure. Ensure the presentation is still breech by use of the real time scanner.
- 5. Confirm the Medical Officer performing the procedure is available in 30 minutes before administering the prescribed medications (subcutaneous Terbutaline 0.25mg (250mcg) and consider histamine H2-receptor antagonists e.g. famotidine, where appropriate)
- 6. Following administration of tocolysis monitor the maternal pulse, BP, and the FHR 10 minutely until the ECV is performed.
- 7. Perform the ECV 30 minutes after tocolysis, or when maternal pulse is >100bpm.

Post procedure - whether successful or not

- 1. Monitor the FHR by CTG for 40 minutes.
- 2. Monitor the maternal pulse, BP, vaginal loss, and pain 15 minutely for 30 minutes.
- 3. If the mother is Rhesus negative, obtain blood for a Group and Antibody screen (Kleihauer), then administer Anti-D as required.
- 4. Discharge the woman home after 1 hour provided:
 - Maternal observations are normal
 - There is a normal CTG. See WNHS clinical guideline: Obstetrics and Gynaecology: Fetal Surveillance: Fetal Heart Rate Monitoring
 - There are no signs of labour, abnormal vaginal loss, or abdominal pain
 - The medical team is satisfied with the maternal fetal condition
- 5. Instruct the woman to contact the hospital, and come in if any of these abnormalities occur.

Flow chart for external cephalic version



External cephalic version

Background information

Performing an external cephalic version (ECV) has been shown to reduce the rate of non-cephalic presentations at term thereby reducing the number of caesarean sections for breech birth at term.^{10, 15} Additionally, there is currently insufficient evidence on the effect of other techniques, such as maternal positioning and moxibustion, for breech version.¹⁶ Spontaneous version rates for nulliparous women are approximately 8% after 36 weeks gestation, and only 5% after an unsuccessful ECV. If a successful ECV is done, spontaneous reversion will occur in 5% of cases.

Risk for complications following ECV include abnormal cardiotocograph (CTG) patterns which may be uncomplicated and transient or pathological¹⁷, bleeding which may be asymptomatic (e.g. fetomaternal transfusion, abruption)^{17, 18}, cord complications^{17, 18}, ruptured membranes¹⁸, and fetal mortality¹⁷.

A recent large multi-centre randomised study found that ECV initiated at 34-35 weeks gestation compared with 37 weeks or more increases the probability of cephalic presentation at birth, however it does not reduce the rate of caesarean section, and it may increase the risk rate for preterm birth.¹³

Key points

- ECV should be offered from 36 weeks gestation for nulliparous women and 37 weeks for multiparous women with uncomplicated breech presentations and no contra-indications to the procedure.¹⁹ ECV is not appropriate if a caesarean is indicated for other reasons.²⁰
- 2. The success rates for ECV are approximately 40% in nulliparous women and 60% in multipara.²⁰
- 3. Spontaneous reversion to breech presentation after successful ECV occurs in less than 5% of women.¹⁹
- 4. ECV has low complications rates with approximately 0.5% requiring caesarean section.^{20, 21}
- 5. Women who have a successful ECV have a higher risk of requiring a caesarean section in labour compared to other women.²²
- 6. Tocolysis used to relax uterine muscles increases the success rate of a ECV. 15, 19
- 7. Women who are Rhesus negative will require a blood group and anti-body screen (Kleihauer) after the ECV is performed, and Anti-D administered.

Contra-indications to performing an ECV

Absolute contra-indications

 Where caesarean section (CS) is indicated^{19, 20} e.g. placenta praevia¹³, previous classical CS¹³

- Abnormal CTG¹⁹; fetal heart rate abnormalities¹³
- Ruptured membranes^{13, 19}f
- Contracted pelvis
- Fetal death
- Placental abruption¹³

Relative contra-indications

- Small-for-gestational-age fetus with abnormal Doppler parameters¹⁹; Fetal hypoxia²⁰
- Pre-eclampsia with proteinuria¹⁹; or Antepartum haemorrhage²⁰ in the last week¹⁹
- Major fetal anomalies^{19, 20}; Unstable lie¹⁹; Multiple pregnancy^{19, 20}
- A restrictive nuchal cord²⁰, Hyper-extended head^{13, 20}
- Major uterine anomaly^{13, 19, 20}; Scarred uterus^{19, 20}
- Oligohydramnios^{13, 20} or hydramnios¹³

Procedure

Prior to the procedure

- 1. Ensure the woman has received counselling about risks, benefits, and outcomes associated with performing an ECV. The MR 295.75: Consent form for ECV must be signed before commencing the procedure.
- 2. Check there are no contra-indications to performing an ECV.
- 3. A formal ultrasound assessment for fetal presentation, placental location, amniotic fluid volume and assessment for fetal or uterine anomalies must be performed 24 hours prior to the procedure.
- 4. Perform a CTG for 20 minutes (or less if a normal trace is obtained in a shorter time) prior to the procedure.
- 5. Complete a portable ultrasound prior to commencing preparation for the procedure to ensure the fetus is still in the breech presentation.
- 6. Perform baseline maternal observations of pulse, respirations, and blood pressure (BP). Then monitor the maternal pulse, BP, and fetal heart rate (FHR) every 10 minutes after tocolysis is given until the ECV commences.
- 7. Arrange prescription for subcutaneous Terbutaline 0.25mg (250mcg) and consider histamine H2-receptor antagonists e.g. <u>famotidine</u>, where appropriate.
- 8. Ensure the Obstetrician or Medical Officer performing the procedure will be available to perform the procedure in 30 minutes time before administering the prescribed anti-emetic and tocolytic.
- 9. Commence the ECV 30 minutes after tocolysis, or when the maternal pulse is >100bpm.

Procedure

- 1. Ensure the woman has emptied her bladder.
- 2. Position the woman in a recumbent position (a wedge placed under her buttocks).
- 3. Lubricate the maternal abdomen using mineral oil, ultrasonic gel, or talcum powder. This decreases friction which may reduce maternal discomfort.
- 4. Place your hands between the fetal breech and the maternal symphysis pubis.
- 5. Dislodge the breech from the maternal pelvis.
- 6. After the breech is dislodged, guide the fetal head in a forward or backward roll toward the maternal pelvis while simultaneously guiding the breech towards the fundus.
- 7. If the forward roll is unsuccessful an alternative approach, the backward flip can be attempted.
- 8. Abandon the procedure if:
 - attempts at a forward roll or a backward flip are unsuccessful
 - more than 5 minutes of uterine pressure is required
 - there is maternal intolerance to the procedure
 - there is evidence of an abnormal FHR using sonography.

Post procedure

Regardless of whether the ECV is successful or not:

- 1. Monitor the FHR by CTG for 40 minutes. A normal CTG must be achieved prior to discharge.
- 2. Monitor and record the maternal pulse, BP, and vaginal loss 15 minutely for 30 minutes.
- 3. Obtain a blood group and antibody screen sample for a Kleihauer test and arrange prophylactic Anti-D administration if the maternal blood group is Rhesus negative.
- 4. Women may be discharged home after 1 hour provided:
 - The maternal observations are normal
 - The CTG is normal.
 - The obstetric team is satisfied with the fetal and maternal condition.
- 5. Instruct the woman to phone or return to the hospital if any of the following occur:
 - Vaginal bleeding
 - Rupture of membranes
 - Commencement of labour

- Change in pattern or decreased fetal movements
- Abnormal abdominal pain.
- 6. Ensure an antenatal clinic appointment is made for obstetric medical review in 1 week to assess for spontaneous reversion.

Breech presentation: Planned vaginal birth QRG

This QRG is to be read in conjunction with the full details in this document. Medical and midwifery staff should be familiar with the contents of the full guideline.

NB:

Women planning a breech birth who develop complications which are contraindications to a planned term breech birth must be referred for review by the team consultant. If the consultant is unavailable or after hours, the woman must be reviewed in MFAU / Labour and Birth Suite by the Senior Registrar.

The Consultant / Senior Registrar must have an informed discussion with the woman (and her support person if available) including options, recommendations and the possible outcomes.

This conversation and the final decision should be clearly documented in the medical record by the medical officer with the appropriate level of seniority undertaking the counselling.

NOTE 1: DEFINITION OF UNCOMPLICATED BREECH

- Flexed or extended legs
- 37-42 weeks gestation
- No evidence of cephalopelvic disproportion (CPD)¹
- Clinical estimation of fetus >2.5kg and < 3.8kg
- Well flexed head¹
- No anticipated mechanical difficulty

NOTE 2: PROGRESS OF LABOUR

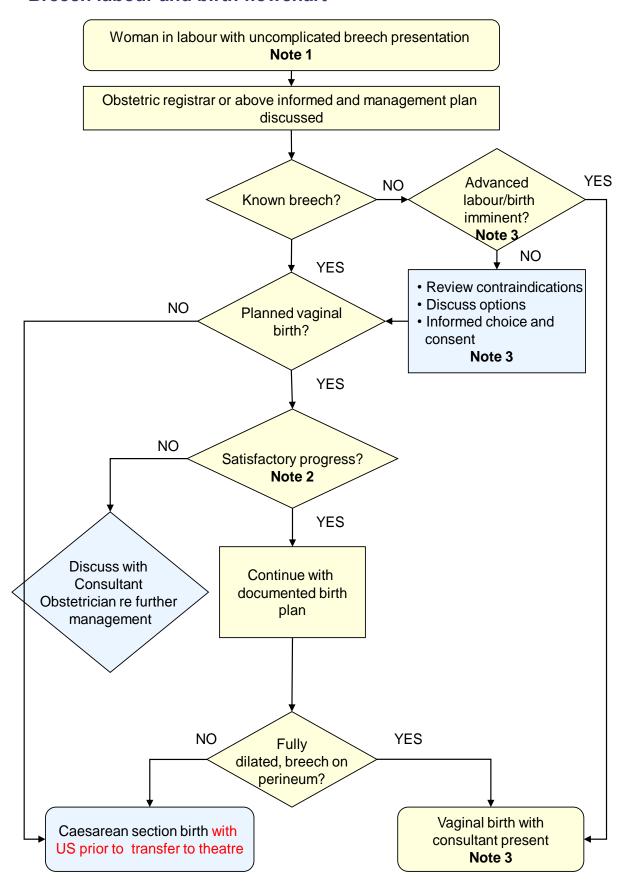
- Cervical dilatation of 1cm per hour regardless of parity
- In second stage should be progressive descent of the buttocks through the pelvis, and the breech should be on the pelvic floor within 1 hour of full dilatation, even in the absence of active pushing.

NOTE 3: LABOUR RECOMMENDATIONS

- Inform the Obstetric Consultant at the onset of labour, **and** when the woman's cervix is fully dilated.
- Notify the paediatrician at the onset of labour, **and** arrange also to be present at the birth.
- Continuous fetal monitoring¹
- Availability of facilities to perform a caesarean section.¹
- Arrange additional equipment e.g. breech towel, lithotomy stirrups.
- Confirm the cervix is fully dilated prior to pushing to ensure the woman does not have a premature urge to push.
- When fully dilated the women should not be encouraged to actively push until she has a strong urge to do so, or the buttocks are on view.
- Birth should be imminent after 1 hour of active pushing in a nullipara, and after ½ hour of active pushing for a multipara.
- Consider urinary catheterisation prior to birth.
- Controlled and gentle birth of the neonate's head:
 - Maurice Smellie-Veit grip (or adaptations for active birth positions)
 - Forceps to the after-coming head
- **No** breech extraction

Do not administer third stage oxytocic until after the breech birth is completed i.e. until the head is delivered.

Breech labour and birth flowchart



Planned vaginal breech birth

Background information

Vaginal breech birth can be associated with a higher risk of perinatal mortality and short-term neonatal morbidity compared to birth by elective caesarean section²³, however study of long term follow-up at 2 years found that the neonatal neurological outcomes did not differ between either mode of birth even in the presence of serious short-term morbidity.²

Complications of vaginal breech birth include Erb's palsy, fractures to the clavicle, humerus or femur, and dislocation of the hips or shoulders. Trauma to the abdominal structures may occur if the fetal abdomen is grasped incorrectly, some bruising may be noted especially to male genitalia,²⁴ and other complications such as cerebral haemorrhage or fractures, or spinal cord injury are additional risks.²³

Key points

- 1. Planned term vaginal breech birth is a reasonable option provided there are no fetal or maternal contra-indications and the strict criteria is followed. The presence of an Obstetrician competent in breech birth and facilities for immediate caesarean section are required²⁵.
- 2. Women planning a breech birth who develop complications which are contraindications to a planned breech birth must be referred for review by the team consultant. If the consultant is unavailable or after hours, the woman must be reviewed in MFAU / Labour and Birth Suite by the Senior Registrar. The Consultant / Senior Registrar must have discussions with the woman and the junior medical staff.
- The Consultant / Senior Registrar must have an informed discussion with the woman (and her support person if available) including options, recommendations and the possible outcomes.
- 4. This conversation and the final decision should be clearly documented in the medical record by the medical officer with the appropriate level of seniority undertaking the counselling.
- 5. The Consultant Obstetrician is informed at the onset of labour, when the woman's cervix is fully dilated, and if there are concerns with maternal-fetal wellbeing or labour progress
- The paediatric team is informed at the onset of labour, and should be present for the birth as per WNHS Clinical Guideline, O&G: Labour & Birth: Paediatric Team Attendance for 'At Risk' Births- LBS QRG
- 7. Clinical pelvic examination should be performed to assess pelvic adequacy when assessing suitability for vaginal breech birth.
- Induction of labour is not recommended and is considered non-standard management².

- 9. Augmentation of labour is not recommended but may be appropriate in the presence of uterine dystocia provided the consultant obstetrician is confident there is no fetopelvic disproportion^{2, 23}.
- 10. Continuous CTG monitoring during labour should be performed²⁵.
- 11. A vaginal examination (VE) should be performed if rupture of membranes occurs², or to confirm full dilatation prior to a woman pushing, ensuring she does not have a premature urge to push.
- 12. Cervical dilatation during **active** labour should occur at a rate of at least 1cm per hour.
- 13. The woman should not be encouraged to actively push until the breech has reached the pelvic floor and she has a strong urge, or the buttocks are on view.
- 14. If birth is not imminent after 1 hour of active pushing for a nullipara woman, or ½ hour for a multipara woman, a caesarean section should be initiated.
- 15. Breech extraction is not recommended during the breech birth of a singleton fetus.
- 16. Third stage oxytocic should not be administered until the fetal head is delivered.

Definition of an uncomplicated breech presentation

- Flexed or extended fetal legs.
- 37-42 weeks (women should be advised of risks associated with prolonged pregnancy).
- No evidence of cephalopelvic disproportion (CPD).
- Clinical estimation of the fetus >2.5kg or < 3.8kg.
- Well flexed head.
- No anticipated pelvic obstruction to birth.

On admission – management for women in labour

- Confirm the fetal presentation as flexed or extended breech of uncomplicated term breech and exclude contra-indications for vaginal breech birth by ultrasound.
- 2. Inform the Consultant Obstetrician.
- 3. Notify the paediatric team.
- 4. Commence CTG for continuous fetal heart rate monitoring.
- 5. Perform a digital VE to assess progress, and exclude cord presentation / prolapse.
- 6. Collect blood for a group and hold.

See the following two pages for planned vaginal breech management in the <u>first stage</u> and <u>second stage</u> of labour.

Flow chart – Planned term singleton vaginal breech birth

See section in this document: Breech Vaginal Birth - Quick Reference Guide

First stage management

Care is the same as in cephalic presentation, with some additional care for the management of an uncomplicated term breech presentation.

Action	MANAGEMENT IN FIRST STAGE	ADDITIONAL INFORMATION
Monitoring labour progress	Cervical dilation should be 1cm per hour from 4cm for all women regardless of parity. In the absence of adequate progress in labour, caesarean	The Consultant Obstetrician should be advised of any delay in progress.
	section is recommended.	
Augmentation	Not normally considered, however may be only used in individualised special circumstances for uterine dystocia ²⁶ if there is no clinical	Poor progress may be a risk factor for difficulty with birth of the after coming head ³ .
	suspicion of CPD. The decision for use is only made with consultant obstetrician approval.	Intact membranes prevent risk for cord prolapse and artificial rupture of membranes (ARM) is not recommended ²⁴ .
Fetal Surveillance	Continuous CTG ²⁵	
Vaginal Examination (VE)	 With spontaneous rupture of membranes To confirm full dilatation if a woman has an urge to push. Monitor routine progress of labour and more frequently as the situation requires. 	Excludes cord prolapse ²⁷ . This confirms full dilatation of the cervix in the event of an urge to push.
Analgesia	The woman to choose her preferred method of analgesia. An epidural may be an option if the woman has a premature urge to push ¹⁸ .	
Bladder Management	Monitor 1-2 hourly	A full bladder may impede descent of the breech.
Hydration	Fasting in not routinely required. Confirm medical recommendation.	Confirm with obstetric team hydration

Action	MANAGEMENT IN FIRST STAGE	ADDITIONAL INFORMATION
		management.
Maternal Positioning	An upright position can be encouraged ¹⁸ .	An upright position may aid the descent of the breech ²⁷ .
Additional Equipment	Availability of the real time ultrasound machine	
Medical notifications	Notify the Consultant Obstetrician: At full dilatation If poor progress of labour If concerns of maternal-fetal wellbeing	

Second Stage Management

Action	MANAGEMENT IN SECOND STAGE	ADDITIONAL INFORMATION	
Confirm second stage	Perform a VE to confirm full dilatation prior to pushing.	Confirms that the woman is able to push if she has the urge.	
Pushing	Encourage active pushing when the woman has a strong urge, or the buttocks are on view.		
Monitoring progress	Birth should be imminent after one hour of active pushing in a nullipara, and after ½ hour for a multipara.	The consultant obstetrician should be immediately notified of any delay in progress.	
	In the absence of adequate progress in second stage, caesarean section is recommended ³ .		
Fetal Surveillance	Continuous CTG ²⁵		
Bladder Management	Consider urinary catheterisation prior to birth if the bladder is not emptied.		
Position for birth	Dorsal or lithotomy	Following maternal consent the practitioner should utilise the maternal position with which they are familiar ³ .	

Action	MANAGEMENT IN SECOND STAGE	ADDITIONAL INFORMATION
Equipment	 Breech towel (warmed) Lithotomy stirrups if necessary Neville-Barnes' and Wrigley's Forceps immediately available 	
Analgesia	As indicated.	
Episiotomy	Not routine – should be performed when indicated to facilitate birth ³ .	
Birth principles	 No breech extraction Traction/ fetal breech manoeuvres on breech are to be avoided unless necessary to expedite birth of a partially expelled fetus in a timely fashion. Gentle suprapubic pressure may aid flexion of the head³. 	Can cause extension of the head and nuchal displacement of the arms. ²⁷
	 Do not handle / manipulate the cord. Extended arms may be delivered by the Løvset manoeuvre.^{2, 18} Nuchal arms may be reduced with reverse Løvsets. Aftercoming head may be delivered spontaneously, with forceps, or by the Mariceau-Smellie-Veit manoeuvre. 	May cause spasm of the cord ¹⁸ . Rapid birth of the head can cause sudden compression and risk for tentorium cerebelli tear. ²⁴
	A small towel wrapped around the fetal hips is useful.	Preserves warmth and provides a grip on the skin.
Paediatrician	Contact the paediatric team to be present for the birth.	
Oxytocin for 3 rd stage	Withhold until the head is born.	

Unstable lie at or near term

Background

An unstable lie is when the fetal presentation repeatedly changes beyond 36 weeks gestation.²⁸ It is more common in parous women. Maternal causes include high parity, placenta praevia, pelvic contracture, uterine malformations,²⁸ pelvic tumours, and a distended maternal urinary bladder. Fetal causes of unstable lie include polyhydramnios,²⁸ oligohydramnios, multiple pregnancy²⁸, fetal macrosomia, and fetal abnormalities (e.g. hydrocephaly, abdominal distension, fetal death²⁸).²⁹

If the membranes rupture when there is an unstable lie, regardless of whether the woman is contracting there is significant risk for cord prolapse, especially if the lie is oblique or transverse, or if the presenting part is high above the pelvic inlet. If lie is not longitudinal when labour commences a compound presentation may result, or the pelvis may remain empty which can lead to fetal distress and other complications.²⁹

Key points

- 1. The Obstetric Team Consultant shall be advised of all women with an unstable lie at or near term.
- 2. A management plan shall be formulated and documented on the 'MR004 Obstetric Special Instruction Sheet'.

Antenatal management

- If a woman is attending a low risk midwifery antenatal clinic and is found to have an unstable lie at term the midwife shall contact the team Consultant/Senior Registrar to discuss management. The next antenatal appointment needs to be with an obstetric medical antenatal team.
- 2. Investigate for causes of unstable lie. Ultrasound assessment may be required.^{28, 30}
- 3. Conduct clinical assessment for the size of the fetus and the pelvis. Ultrasound assessment may be required in addition.
- 4. Formulate a plan for the mode of birth, and document on the MR004 Obstetric Special Instruction Sheet.
- 5. Advise the woman to contact the hospital if she commences labour, or has spontaneous rupture of membranes (SROM).
- 6. Inform the woman about risks of cord prolapse and management if this occurs at home or in the hospital.²⁸
- 7. Provide written advice for the woman (to be given to the St. Johns Ambulance crew) describing management in the event of spontaneous rupture of membranes.

Birth management options

After discussion with the woman who has an unstable lie, one of the 3 birth options should be decided:

- Elective Caesarean section
- Expectant management if no contraindications, await onset of labour
- Active management perform external version of the fetus to longitudinal lie and then commence an induction of labour.
- If a woman lives a long distance from the hospital, admission²⁸ at 38-39 weeks gestation – allows daily observation of lie and presentation and availability of immediate assistance should SROM, cord prolapse, fetal distress, or labour occur.^{29, 30}
- 2. If spontaneous resolution to a longitudinal cephalic lie eventuates management options include:
 - a presentation which remains cephalic for 48 hours may be discharged home after review by the team Consultant and await spontaneous labour²⁹
 - induce labour following team Consultant review.²⁹
- 3. If the lie remains unstable, a stabilising induction may be an option^{28, 30} after review by the team Consultant.

Birth management for a woman in labour with an unstable lie On admission

- Perform a palpation.
- Auscultate the fetal heart rate
- Assess for SROM
- Inform the obstetric medical team including the Senior Registrar

Labour management

- ECV may be performed in early labour provided there are no contraindications. A stabilising / controlled ARM may then be performed.²⁸ **Note**: Prior to controlled ARM, the woman should have an empty rectum and bladder, as these can interfere with the descent of the presenting part.²⁸
- Assess the presentation, lie and descent of the fetus frequently²⁸ until the presenting part is well into the pelvis.
- If SROM occurs perform a VE to exclude cord prolapse or malpresentation.
- Conduct continuous fetal heart rate monitoring in labour.
- Obtain intravenous access and take blood for a full blood count, group and hold- the woman is at increased risk for caesarean section, and possible postpartum haemorrhage particularly if polyhydramnios is present.

Rare presentations

Aim

 To provide guidance on the appropriate consultation and management of malpresentations at WNHS.

Key points

- 1. Rare presentations (malpresentations) of the fetus include the following
 - Face presentation
 - Brow presentation
 - Compound presentation
 - Shoulder presentation
 - Oblique lie
- 2. Breech presentation- a consultant is to attend any viable vaginal breech birth. See Breech Presentation above.
- 3. If a woman is suspected to have a malpresentation antenatally, it must be discussed with the team consultant.
- 4. Management of unstable lie at term shall be discussed with the team consultant.
- 5. The team obstetrician, senior registrar and registrar must be notified immediately of all malpresentations that present in labour.²⁸
- 6. All malpresentations presenting in labour must be reviewed by a consultant

References

- 1. RANZCOG. C-Obs 11: College statement: Management of breech presentation at term2013. Available from: https://www.ranzcog.edu.au/college-statements-guidelines.html#obstetrics.
- 2. Society of Obstetricians and Gynaecologist of Canada. Vaginal delivery of breech presentation. **Journal of Obstetric Gynaecology of Canada**. 2009 (June):557-66.
- 3. Royal college of Obstetricians and Gynaecologists (RCOG). Management of Breech Presentation (Green-top Guideline No. 20b) 2017 [Available from: https://www.rcog.org.uk/en/guidelines-research-services/guidelines/gtg20b/.
- 4. Whyte H, Hannah ME, Saigal S, Hannah WJ, Hewson S, Amankwah K, et al. Outcomes of children at 2 years after planned cesarean birth versus planned vaginal birth for breech presentation at term: The international randomized term breech trial. **Am J Obstet Gynecol**. 2004;191(3):864-71. Available from: http://www.ncbi.nlm.nih.gov/pubmed/15467555.
- 5. Hannah ME, Whyte H, Hannah WJ, Hewson S, Amankwah K, Cheng M, et al. Maternal outcomes at 2

- years after planned cesarean section versus planned vaginal birth for breech presentation at term: The international randomized Term Breech Trial. **Am J Obstet Gynecol**. 2004;191(3):917-27. Available from: http://www.ncbi.nlm.nih.gov/pubmed/15467565.
- 6. Taillefer C, Dube J. Single breech at term: Two continents, two approaches. **JOGC**. 2010 (March):238-43.
- 7. Hannah ME, Hannah WJ, Hewson SA, Hodnett ED, Saigal S, Willan AR. Planned caesarean section versus planned vaginal birth for breech presentation at term: a randomised multicentre trial. Term Breech Trial Collaborative Group. **Lancet**. 2000;356(9239):1375-83. Available from: http://www.ncbi.nlm.nih.gov/pubmed/11052579.
- 8. Rietberg CC, Elferink-Stinkens PM, Visser GHA. The effect of the term breech trial on medical intervention behaviour and neonatal outcome in the Netherlands: An analysis of 35,453 term breech infants. **BJOG: an International Journal of Obstetrics and Gynaecology**. 2005;112:205-9.
- Azria E, Le Meaux JP, Khoshnood B, Alexander S, Subtil D, Goffinet F, et al. Factors associated with adverse perinatal outcomes for term breech fetuses with planned vaginal delivery. Am J Obstet Gynecol. 2012;207(4):285 e1-9. Available from: http://www.ncbi.nlm.nih.gov/pubmed/23021690.
- Hofmeyr GJ, Kulier R. External cephalic version for breech presentation at term (Review). Cochrane Database of Systematic Reviews. 2012 (10). Available from: http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD000083.pub2/pdf.
- 11. Grootscholten K, Kok M, Oei G, et al. External Cephalic Version-Related Risks A Meta-analysis. **Obstetrics & Gynecology**. 2008;112(5):1143-51.
- 12. Collins S, Ellaway P, Harrington D, et al. The complications of external cephalic version: results from 805 consecutive attempts. **BJOG: An International Journal of Obstetrics and Gynaecology**. 2007;114:636-38.
- 13. Hutton EK, Hannah ME, Ross SJ. The Early External Cephalic Version (ECV) 2 Trial: An international multicentre randomised controlled trial of timing of ECV for breech pregnancies. **BJOG: an International Journal of Obstetrics and Gynaecology**. 2011;118:564-77.
- 14. Department of Health Western Australia. Consent to treatment policy for the Western Australian Health System 20112011. Available from: http://www.health.wa.gov.au/circularsnew/attachments/564.pdf.
- 15. Cluver C, Gyte GM, Sinclair M, Dowswell T, Hofmeyr GJ. Interventions for helping to turn term breech babies to head first presentation when using external cephalic version. **Cochrane Database Syst Rev**. 2015;2. Available from: http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD000184.pub4/pdf.
- 16. Hofmeyr GJ, Kulier R. Cephalic version by postural management for breech presentation. **Cochrane Database Syst Rev**. 2012;10. Available from: http://www.ncbi.nlm.nih.gov/pubmed/23076882.
- 17. Collaris RJ, Oei SG. External cephalic version: A safe procedure? A systematic review of version-related risks. **Acta Obstetrics and Gynecology Scandanavia**. 2004;83:511-8.
- 18. Coates T. Malpositions of the occiput and malpresentations. In: Fraser DM, Cooper MA, editors. Myles Textbook for Midwives. 15th ed. Sydney: Churchill Livingstone; 2009. p. 573-605.
- 19. Royal College of Obstetricians and Gynaecologists. External cephalic version and reducing the incidence of breech presentation. **Green-top Guideline No 20a**. 2006.
- 20. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. C-Obs 11: College statement: Management of breech presentation at term2013. Available from: https://www.ranzcog.edu.au/college-statements-guidelines.html#obstetrics.
- 21. Collins S, Ellaway P, Harrington D, Pandit M, Impey LW. The complications of external cephalic version: Results from 805 consecutive attempts. **BJOG**. 2007;114(5):636-8. Available from: http://onlinelibrary.wiley.com/doi/10.1111/j.1471-0528.2007.01271.x/pdf.
- 22. de Hundt M, Velzel J, de Groot CJ, Mol BW, Kok M. Mode of delivery after successful external cephalic version: A systematic review and meta-analysis. **Obstet Gynecol**. 2014;123(6):1327-34. Available from: http://www.ncbi.nlm.nih.gov/pubmed/24807332.
- 23. Hannah ME, Hannah WJ, Hewson SA, et al. Planned caesarean section versus planned vaginal birth for breech presentation at term: A randomised multicentre trial. **The Lancet**. 2000;356:1375-83.
- 24. Thorogood C, Donaldson C. Disturbances in the rhythm of labour. Midwifery preparation for practice. 2nd ed. Sydney: Churchill Livingstones; 2010. p. 819-61.

- 25. Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG). College Statement C Obs-11: Management of breech presentation at term 2016 [Available from: https://www.ranzcog.edu.au/RANZCOG SITE/media/RANZCOG-MEDIA/Women%27s%20Health/Statement%20and%20guidelines/Clinical-Obstetrics/Management-of-breech-presentation-at-term-(C-Obs-11)-Review-July-2016.pdf?ext=.pdf.
- 26. Society of Obstetrics and Gynecology of Canada. SGOC Clinical Practice Guideline No. 256. Substance Use in Pregnancy. **JOGC**. 2011 (April):367-84.
- 27. Lewis P. Malpositions and malpresentations. In: Macdonald S, Magill-Cuerden J, editors. Mayes' Midwifery. 14th ed. Sydney: Bailliere Tindall; 2011. p. 869-98.
- 28. Coates T. Malpositions of the occiput and malpresentations. In: Marshall J, Raynor M, editors. Myles textbook for midwives. 16th ed. Edinburgh: Churchill Livingstone Elsevier; 2014. p. 435-54.
- 29. Mackenzie IZ. Unstable lie, malpresentations and malpositions. In: James D, Steer PJ, Weiner CP, et al, editors. High Risk Pregnancy Management Options. 4th ed. Nottingham: Elsevier Saunders; 2011. p. 1123-37.
- 30. Baskett T, Calder A. Malpresentations. In: Baskett TF, Calder AA, Arulkumaran S, editors. Munro Kerr's operative obstetrics 12th ed. Edinburgh: Elsevier; 2014. p. 116-22.

Related policies

WA Health Consent to Treatment Policy 2023 and Procedure

Related WNHS policies, procedures and guidelines

Form: MR 295.75: Consent form for ECV

WNHS Obstetrics and Gynaecology Clinical Guidelines:

- [Restricted Area Guideline]: <u>Induction of Labour (Methods)</u>: Artificial Rupture of the Membranes (ARM) [access via HealthPoint intranet]
- Fetal Surveillance: Fetal Heart Rate Monitoring

Keywords:	breech, external cephalic version, ELUSCS, obstetric ultrasound, undiagnosed breech, planned breech birth, abnormal lie, unstable lie, transverse lie, oblique lie, high presenting part, polyhydramnios, fetal presentation, face presentation, brow presentation, rare presentation, compound presentation, shoulder presentation, oblique lie, unstable lie, breech presentation, ECV, external cephalic version, QRG, vaginal breech, presenting part		
Document owner:	Obstetrics and Gynaecology Directorate		
Author / Reviewer:	Head of Department- Obstetrics		
Date first issued:	July 2018 (v1)	Version	3
Reviewed:	Oct 2018 (v1.1 amended); April 2021 (v2-amended)); Aug 2023 (v3-amended)	Next review date:	July 2021
Endorsed by:	Obstetrics and Gynaecology Directorate Management Committee	Date:	24/07/2018

NSQHS Standards (v2) applicable:	 □ 1: Clinical Governance □ 2: Partnering with Consumers □ 3: Preventing and Controlling Healthcare Associated Infection □ 4: Medication Safety 	☐ ⑤ 5: Comprehensive Care ☐ ⑥ 6: Communicating for Safety ☐ ⑥ 7: Blood Management ☒ ⑤ 8: Recognising and Responding to Acute Deterioration
Printed or personally saved electronic copies of this document are considered uncontrolled. Access the current version from WNHS HealthPoint.		

Version history

Version	Date	Summary
number		
1	July 2018	First version.
		History : In July 2018 amalgamated seven individual guidelines on abnormalities of lie/presentation dating from March 2001.
		Supersedes:
		Breech Presentation (dated Feb 2018)
		Breech Presentation (Uncomplicated Term) - Planned Vaginal Birth (dated May 2017)
		Breech (Uncomplicated Term) Vaginal Birth QRG (dated Feb 2018)
		4. External Cephalic Version (ECV) (dated April 2015)
		5. ECV: MFAU QRG (dated April 2015)
		6. Rare Presentations (dated April 2015)
		7. Unstable Lie at or Near Term (dated April 2015)
		Changes : Evidence on this topic was reviewed and overall guidance remains unchanged. Minor changes and formatting have been made.
1.1	Oct 2018	Minor amendment- complication rate changed to 'pooled'
2	April 2021	Minor amendment- symbol changed to align with other pages of guideline
3	Aug 2023	Minor amendment- ranitidine removed- no longer available

This document can be made available in alternative formats on request for a person with a disability.

© North Metropolitan Health Service 2023

Copyright to this material is vested in the State of Western Australia unless otherwise indicated. Apart from any fair dealing for the purposes of private study, research, criticism or review, as permitted under the provisions of the *Copyright Act 1968*, no part may be reproduced or re-used for any purposes whatsoever without written permission of the State of Western Australia.

www.nmhs.health.wa.gov.au