## Care of Women with Breech Presentation or Previous Caesarean Birth

## Evidence-based Best Practice Guideline SUMMARY

OCTOBER 2004

The purpose of the guideline is to provide guidance for clinicians (obstetricians, general practitioners, and midwives) and women, through the presentation of accurate information on the risks and benefits of caesarean compared to planned vaginal delivery for women with breech presentation or who have had previous caesarean.

Although the team idenified four main indications for caesarean that could potentially be addressed by guideline development, the focus of this guideline is on breech presentation and vaginal birth after caesarean (VBAC). There is a lack of well-designed studies in this area and more research is needed to adequately answer many of the questions raised in this guideline.

## BREECH PRESENTATION

### **KEY MESSAGES**

- Evidence-based information on the risks and benefits of caesarean and vaginal birth should be provided to women prior to birth so that they can make informed decisions and choices about their care.
- Breech presentation is associated with an increased risk of perinatal and long-term morbidity, even in term babies without congenital abnormalities, regardless of type of birth.
- If breech presentation exists at term, then women should be offered a caesarean delivery. After full and frank discussion of the risks and benefits to her and her baby, women may choose for themselves either vaginal or caesarean birth. Regarding short-term benefits, for every 30 caesarean sections performed for breech instead of vaginal delivery, one baby will avoid death or serious neonatal morbidity. Regarding short-term risks, for every 167 caesareans performed for breech instead of vaginal delivery and the short short term morbidity (such as haemorrhage, anaemia, transfusion or infection). Long-term benefits and risks are not easily quantified.
- Expertise in vaginal breech birth remains important, and local training schemes should be implemented to maintain the skills for facilitating vaginal breech birth.
- External cephalic version (ECV) from 37 weeks gestation can change presentation from breech to cephalic in women with uncomplicated breech pregnancy (extended or flexed leg) and reduce the effectiveness of maternal positioning exercises. There is insufficient evidence to support the use of ECV before 37 weeks.
- Tocolysis with betamimetics to facilitate the process of ECV may reduce the caesarean rate. There is insufficient evidence to support the use of analgesia to facilitate ECV.
- Moxibustion is an acupuncture technique that involves burning herbal preparations to stimulate the acupoint by the 5th toe. It may be offered to women with breech presentation.

See back page for VBAC key messages.

This Guideline is endorsed by:





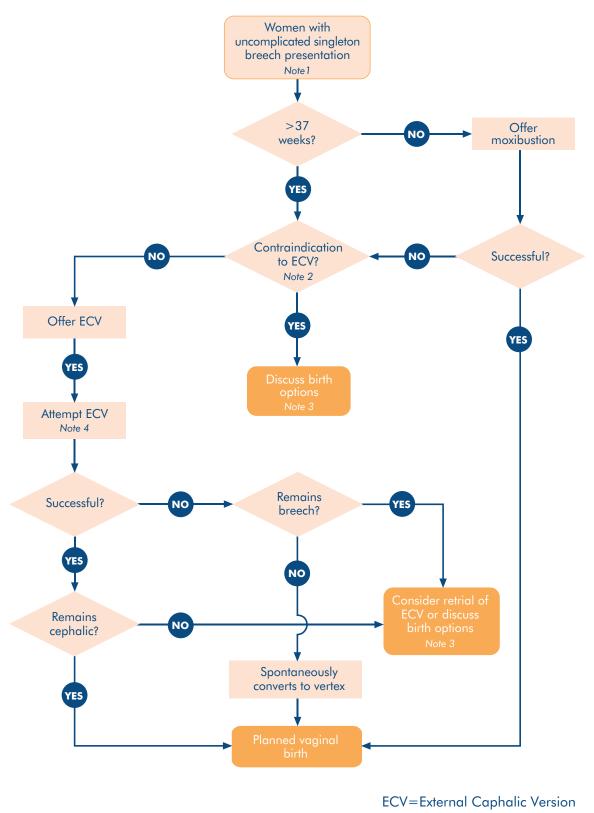






Supported by: The Royal New Zealand College of General Practitioners Women's Hospitals Australasia

# ANTENATAL CARE OF WOMEN WITH BREECH PRESENTATION ALGORITHM



See notes over page

## NOTES TO ANTENATAL CARE OF WOMEN WITH BREECH PRESENTATION ALGORITHM

#### Note 1: Assessment in Antenatal Period

Consultation with an obstetrician prior to 36 weeks gestation Uncomplicated single breech presentation:

- extended or flexed leg breech
- no foeto-pelvic disproportion
- no hyperextension of foetal head
- no foetal anomaly
- no placenta praevia

#### Note 2: Contraindications to ECV

- Multiple pregnancy
- Antepartum haemorrhage
- Placenta praevia
- Established labour
- Premature rupture of membranes
- Severe pregnancy-induced hypertension
- Maternal cardiac disease
- Previous uterine surgery (apart from caesarean)
- Cases in which caesarean is necessary
- Lack of maternal consent

#### Note 3: Birth Options

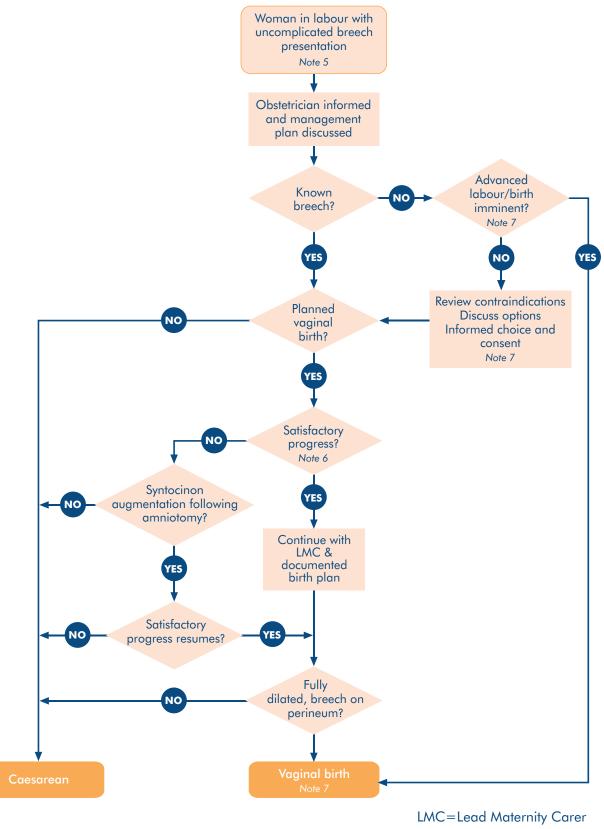
- Planned vaginal birth
- Planned caesarean

Risks and benefits discussed

#### Note 4: Attempted ECV

- ECV should be undertaken by appropriately trained professionals
- Tocolysis may be used
- Ultrasound may be used
- A cardiotocograph is necessary
- ECV should be performed close to facilities for emergency birth with caesarean

### BREECH LABOUR AND BIRTH ALGORITHM



See notes over page

#### NOTES TO BREECH LABOUR AND BIRTH ALGORITHM

#### Note 5: Definition of Uncomplicated Breech

- Flexed or extended legs
- 37 42 weeks gestation
- No evidence of cephalopelvic disproportion (CPD)
- Clinical estimation of foetus <4 kg
- Well-flexed head
- No anticipated mechanical difficulty

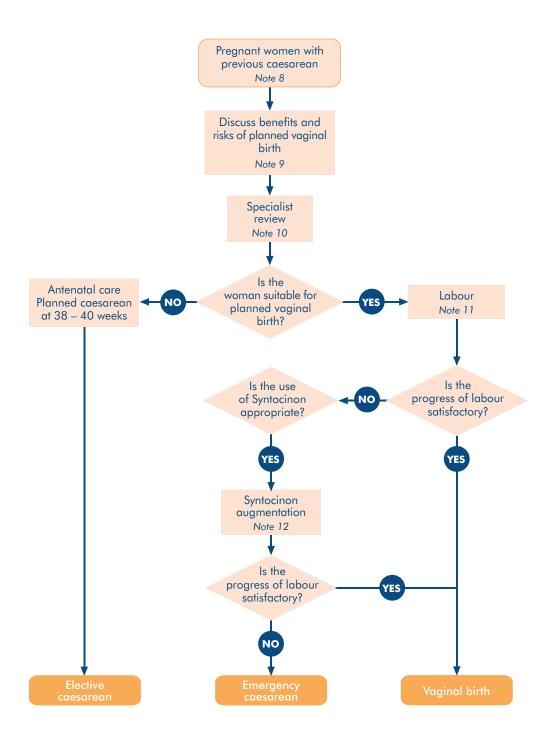
#### Note 6: Progress of Labour

- Cervical dilatation:
  - at least 0.5 cm/hour from 3 cm for multipara
  - at least 0.5 cm/1.5 hours from 3 cm for nullipara/ no previous vaginal birth
- Descent of buttocks to perineum within 2 hours from full dilation

#### Note 7: Labour Recommendations

- Active pushing not encouraged until buttocks on perineum
- Birth imminent after 1 hour active pushing
- Lovsett manoeuvre if birth of thorax is slow
- · Controlled and gentle birth of head
  - Mauriceau-Smellie-Veit grip (or adaptations for active birth positions)
  - Forceps to aftercoming head
- No breech extraction
- Obstetrician should be informed at onset of labour and at onset of active pushing
- Hospital facilities for planned vaginal breech birth include skilled midwives, paediatricians and obstetricians with facilities for monitoring the labour, and anaesthetic and operating facilities for immediate caesarean

## VBAC ALGORITHM



### NOTES TO VBAC ALGORITHM

#### Note 8: Assessment in Antenatal Period

Consider:

- type of previous uterine incision
- other medical conditions

#### Note 9: Risk-benefit Assessment

#### **Benefits**

- Reduced infection
- Reduced blood loss and transfusions, reduced blood clots
- Early mobilisation
- Reduced need for medical intervention
- Vaginal birth successful in 60 80% of women who labour after previous caesarean

• gestational age

#### Risks

- Uterine rupture (0.2 1.5 %)
- Need for emergency caesarean (30%)
- Foetal distress + need for baby to go to neonatal unit
- Disabled infant or neonatal death

NB: Risk of cerebral palsy/neonatal death is similar in all groups, except where uterine rupture occurs.

#### Note 10: Specialist Review

- In accordance with the Maternity Reference Guidelines of the MOH, the LMC must recommend to the women or parents that a consultation with a specialist is warranted
- Women with breech, multiple pregnancy or placenta praevia should be recommended to have elective caesarean

#### Note 11: In Labour

- Hospital facilities for planned vaginal birth include skilled midwives, paediatricians and obstetricians with facilities for monitoring the labour, and anaesthetic and operating facilities for immediate caesarean section
- Pain relief in labour is a personal choice
- Monitoring by auscultation or electronic methods is recommended
- Intravenous line and 'Group + Hold' are recommended
- The use of Syntocinon is not contraindicated

#### Note 12: Syntocinon

- There is no evidence on which to recommend the most effective syntocinon dose
- Length of Syntocinon use is limited to 6 hours
- Continue monitoring for uterine rupture as in Note 11

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## VAGINAL BIRTH AFTER CAESAREAN

### **KEY MESSAGES**

- Evidence-based information on the risks and benefits of caesarean and vaginal birth should be provided to women prior to birth so that they can make informed decisions and choices about their care.
- Women with previous caesarean with no contraindications to vaginal birth should be encouraged to labour spontaneously.
- All women who have had a previous caesarean must be referred for consultation with a specialist obstetrician during the antenatal period, preferably prior to 36 weeks.
- Pregnant women with two previous caesarean births and no additional risk factors for vaginal birth may be offered planned vaginal birth after discussing the risks and benefits.
- X-ray pelvimetry in women with previous caesarean is not recommended.
- In the majority of women with previous caesarean, induction of labour may be associated with slightly lower rates of successful vaginal birth compared to women who are not induced. The small increased risk of uterine rupture with the use of prostaglandins should be considered when planning and conducting induction of labour, and this risk should be discussed with the woman.
- Limited data suggest that the careful use of Syntocinon augmentation may be used in women with previous caesarean.
- Pregnant women with previous caesarean may be offered an epidural although there is no evidence that this will improve the chance of successful vaginal birth.
- The possible benefits and risks of continuous electronic foetal monitoring should be discussed with women with previous caesarean. Regardless of the chosen monitoring method, the foetal heart rate should be recorded. Abnormalities in the foetal heart rate may precede uterine rupture and specialist consultation should be sought immediately.
- Women with previous caesarean should be offered continuity of midwifery care during pregnancy, labour and birth.

#### **GUIDELINE DEVELOPMENT PROCESS**

In 2000, the Ministry of Health commissioned the New Zealand Guidelines Group to work with the maternity sector to develop clinical guidelines to determine safe and effective alternatives to caesarean. A multidisciplinary guideline development team was formed in February 2001.

The guideline was developed by Cindy Farquhar (Chair), Anne Lethaby (Project Manager), Karen Guilliland, Sharron Cole, Joanne Rama, Bridget-Mary McGown, Maggie Banks, Nimisha Waller, Don Simmers, Colin Conaghan, Mahesh Harillal, Marion Heeney, Lynda Croft, Rob Buist, Maralyn Foureur, Celia Butler, Joanne Rama, Brenda Hinton, Philippa Peck, Ann Yates, Tim Cookson, Alec Ekeroma and Catherine Marshall.

Four topics were initially identified as the main indications for caesarean that could potentially be addressed by guideline development: breech presentation, previous caesarean, slow labour (failure to progress) and foetal distress. Breech presentation and VBAC are the focus of this guideline. Further work on slow labour and foetal distress is underway and expected to be completed in 2005.

This guideline was developed by the NZGG.

An electronic copy of the full guideline is available for download from <u>www.nzgg.org.nz</u> or a printed copy is available from <u>info@nzgg.org.nz</u>, phone 64-4-471 4180 or Box 10-665, Wellington, New Zealand.

