Key:

OB seek obstetrician advice (transfer to obstetric unit if appropriate)

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Normal labour and birth

Care throughout labour

Ask the woman about her wants and expectations for labour

Don't intervene if labour is progressing normally

Tell the women that first labour lasts on average 8 hours and second labour lasts on average 5 hours

Ensure supportive one-to-one care

Do not leave the woman on her own

Encourage involvement of birth partner(s)

Encourage the woman to mobilise and adopt comfortable positions

Take routine hygiene measures

Do not give H_2-receptor antagonists or antacids routinely to low-risk women

For coping with pain, see pages 10–11

Vaginal exam

Tap water may be used for cleansing prior to exam

Ensure exam is really necessary

Ensure consent, privacy, dignity and comfort

Explain reason for the exam and what's involved

Explain findings sensitively

Initial assessment

Listen to the woman. Ask about vaginal loss and contractions

Review clinical records

Check temperature, pulse, BP, urinalysis

Observe contractions, fetal heart rate (FHR)

Palpate abdomen

Offer vaginal exam

For coping with pain, see pages 10–11

Women not in established labour

If initial assessment normal, offer individualised support and encourage these women to remain at/return home

For prelabour rupture, see page 14

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First stage of labour

Use a partogram once labour is established

If a partogram action line is used, this should be a 4-hour action line

Every 15 min after a contraction check FHR

Every 30 min: document frequency of contractions

Every hour: check pulse

Every 4 hours: check BP, temperature and offer vaginal exam

Regularly: check frequency of bladder emptying

Consider the woman's emotional and psychological needs

For coping with pain, see pages 10–11

Concerns OB

Indications for electronic fetal monitoring (EFM) in low-risk women, e.g. significant meconium-stained liquor, abnormal FHR, maternal pyrexia, fresh bleeding; see pages 17 –18

↑ diastolic BP (over 90 mmHg) or ↑ systolic BP (over 140 mmHg) twice, 30 min apart

Uncertainty about the presence of a fetal heartbeat

Suspected delay

Nulliparous: < 2 cm dilatation in 4 hours

Parous: < 2 cm dilatation in 4 hours or slowing in progress

See page 12

↓

see top of page 8

Second stage of labour

Every 5 min after a contraction: check FHR

Every 30 min: document frequency of contractions

Every hour: check BP, pulse, offer vaginal exam

Every 4 hours: check temperature

Regularly: check frequency of bladder emptying

Assess progress, including fetal position and station

If woman has full dilatation but no urge to push, assess after 1 hour

Discourage the woman from lying supine/semi-supine

Consider the woman's position, hydration and pain-relief needs. Provide support and encouragement

For coping with pain, see pages 10–11

Concerns OB

Indications for EFM in low-risk women, e.g. meconium-stained liquor, abnormal FHR, maternal pyrexia, fresh bleeding, oxytocin for augmentation, see pages 17–18

Nulliparous: consider oxytocin, with offer of regional analgesia, if contractions inadequate at onset of second stage

Delay

Nulliparous: active second stage 2 hours

Parous: active second stage 1 hour

See page 13

Episiotomy OB / HT

Carry out episiotomy only when there is:

- clinical need such as instrumental birth
- suspected fetal compromise

Do not offer routinely following previous third- or fourth-degree trauma

Use mediolateral technique (between 45° and 60° to right side, originating at vaginal fourchette)

Use tested effective analgesia

Birth

see top of page 9

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Third stage of labour
Observe physical health

Check vaginal loss

Active management: oxytocin (10 IU IM), early cord clamping/cutting and controlled cord traction; advise that this reduces risk of haemorrhage and shortens third stage

Physiological management: if requested by low-risk woman. No oxytocin/no early cord clamping; delivery by maternal effort. Do not pull cord or palpate uterus

Concerns OB
Retained placenta

Active management: > 30 min

Physiological management: > 1 hour

See page 16

Care after birth
Woman: observe general physical condition, colour, respiration, how she feels; check temperature, pulse, BP, uterine contractions, lochia, bladder voiding. Examine cord, placenta and membranes. Assess maternal emotional/psychological condition

Baby: record Apgar score at 1 and 5 min; keep warm

Encourage skin-to-skin contact between woman and baby as soon as possible

Don't separate the woman and baby in the first hour

Initiate breastfeeding within the first hour

After 1 hour, record baby's head circumference, body temperature and weight

Concerns OB
Suspected postpartum haemorrhage: take emergency action, see page 20

Basic resuscitation of newborn babies should be started with air, see page 19

Perineal care
Carry out systematic assessment of any trauma, including a rectal examination, sensitively. Explain assessment to the woman and confirm analgesia is effective. Document extent and findings

Lithotomy, if required, only to be used for assessment and repair

First-degree trauma: suture skin unless well opposed

Second-degree trauma: suture vaginal wall and muscle for all second-degree tears. Suture skin unless well opposed

Use continuous non-locked technique for suturing vaginal wall and muscle

Use continuous subcuticular technique for suturing skin

Offer rectal NSAIDs following perineal repair

For coping with pain, see pages 10–11

Concerns OB
Refer if uncertain of nature/extent of trauma

Third- or fourth-degree trauma

Coping with pain

Supporting women

- Consider your attitude to coping with pain in labour and ensure your care supports the woman's choice.
- Offer support and encouragement.
- Encourage her to ask for analgesia at any point during labour.

Pain-relieving strategies

- Encourage labouring in water to reduce pain.
- Support women's use of breathing/relaxation techniques, massage, music.
- Acupuncture, acupressure and hypnosis should not be provided, but do not prevent women if they wish to use these.
- Do not offer TENS to women in established labour.

Inhalation analgesia and opioids

- Ensure access to Entonox and opioids such as pethidine or diamorphine. Explain that:
  - they provide limited pain relief
  - Entonox may make the woman feel nauseous and light-headed
  - opioids may cause drowsiness, nausea and vomiting in the woman
  - opioids may cause short-term respiratory depression and drowsiness for several days in the baby
  - opioids may interfere with breastfeeding.
- Provide antiemetic if opioids used.
- No birthing pool or bath within 2 hours of opioids or if drowsy.

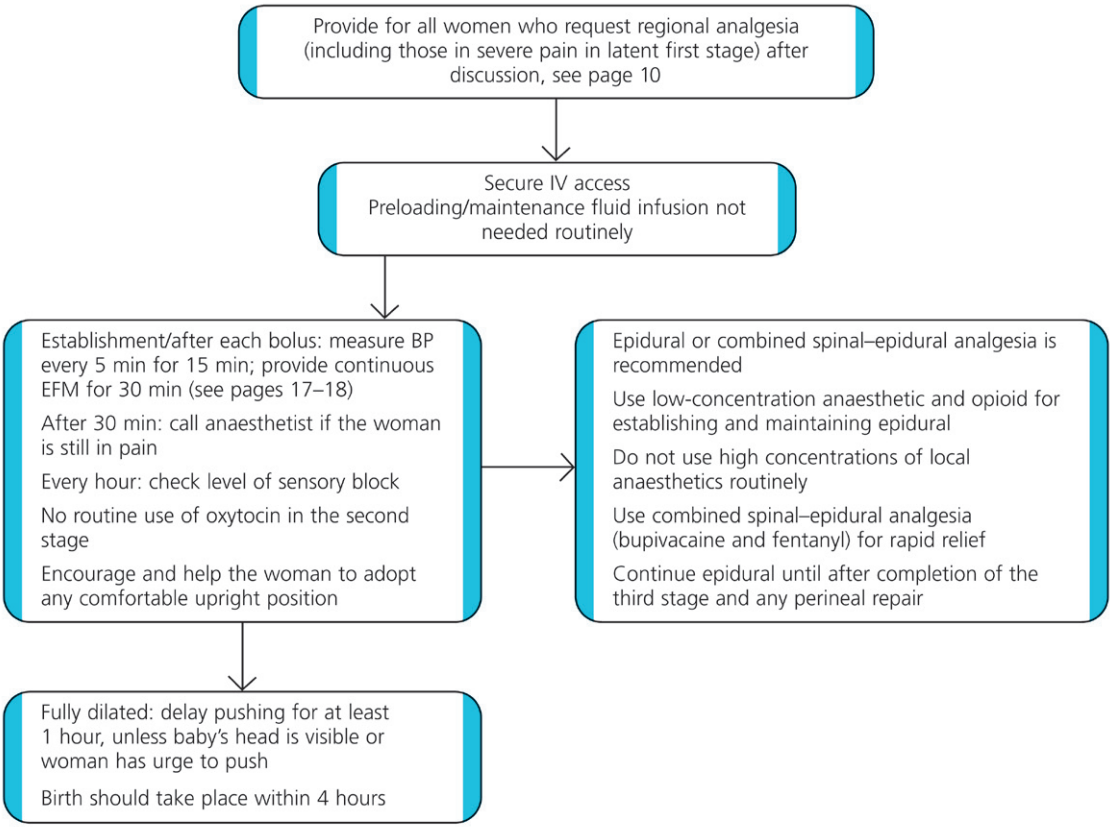
Before choosing epidural

- Inform women that epidural:
  - is only available in obstetric units
  - provides more effective pain relief than opioids
  - is associated with a longer second stage of labour and an increased chance of vaginal instrumental birth
  - is not associated with long-term backache
  - is not associated with a longer first stage of labour or an increased chance of caesarean birth
  - is accompanied by a more intensive level of monitoring and IV access
  - large amounts of epidural opioid may cause short-term respiratory problems in the baby and make the baby drowsy.

See page 11.

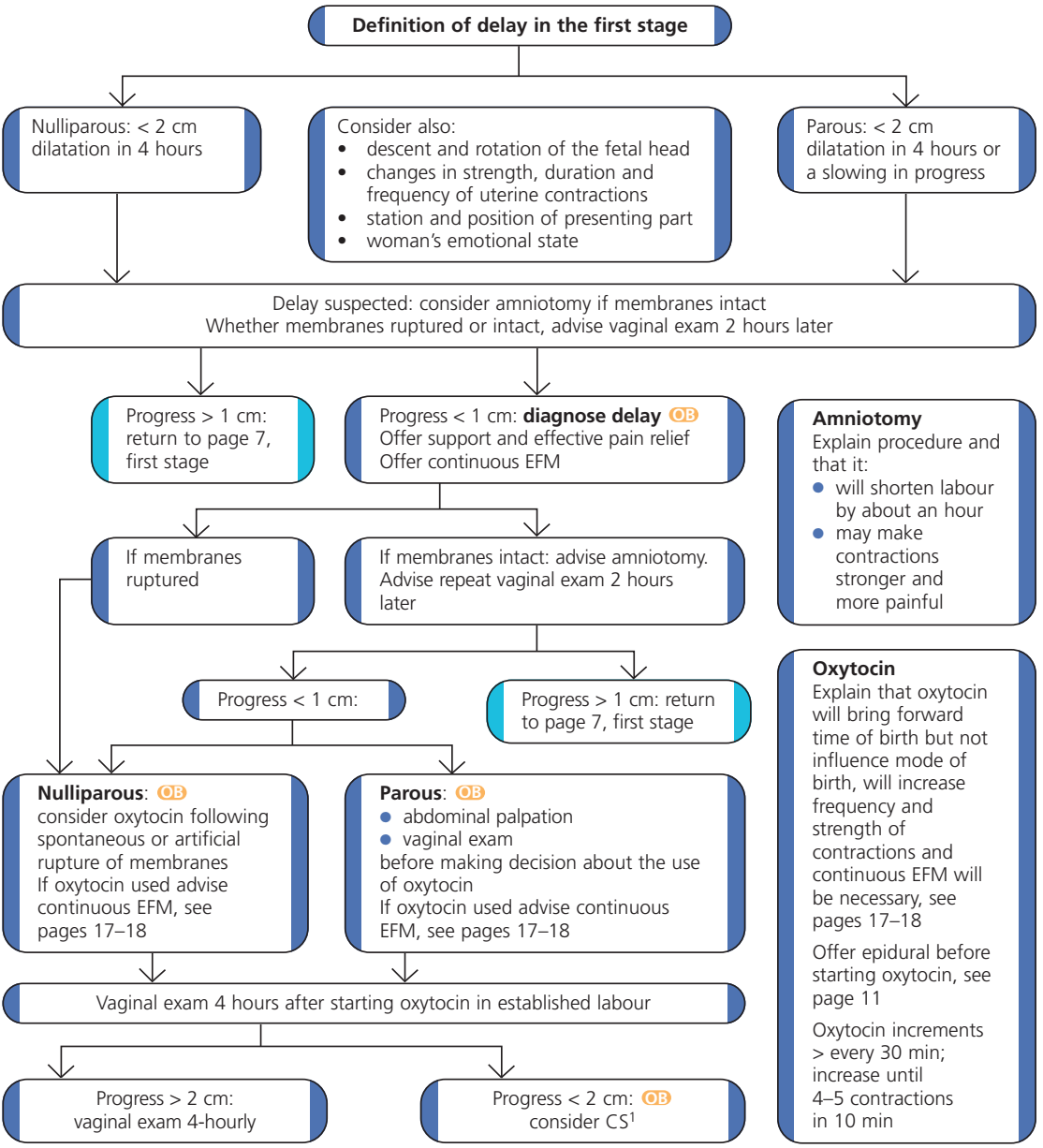
Regional analgesia

(Regional analgesia is only available in obstetric units, administered by an anaesthetist.)



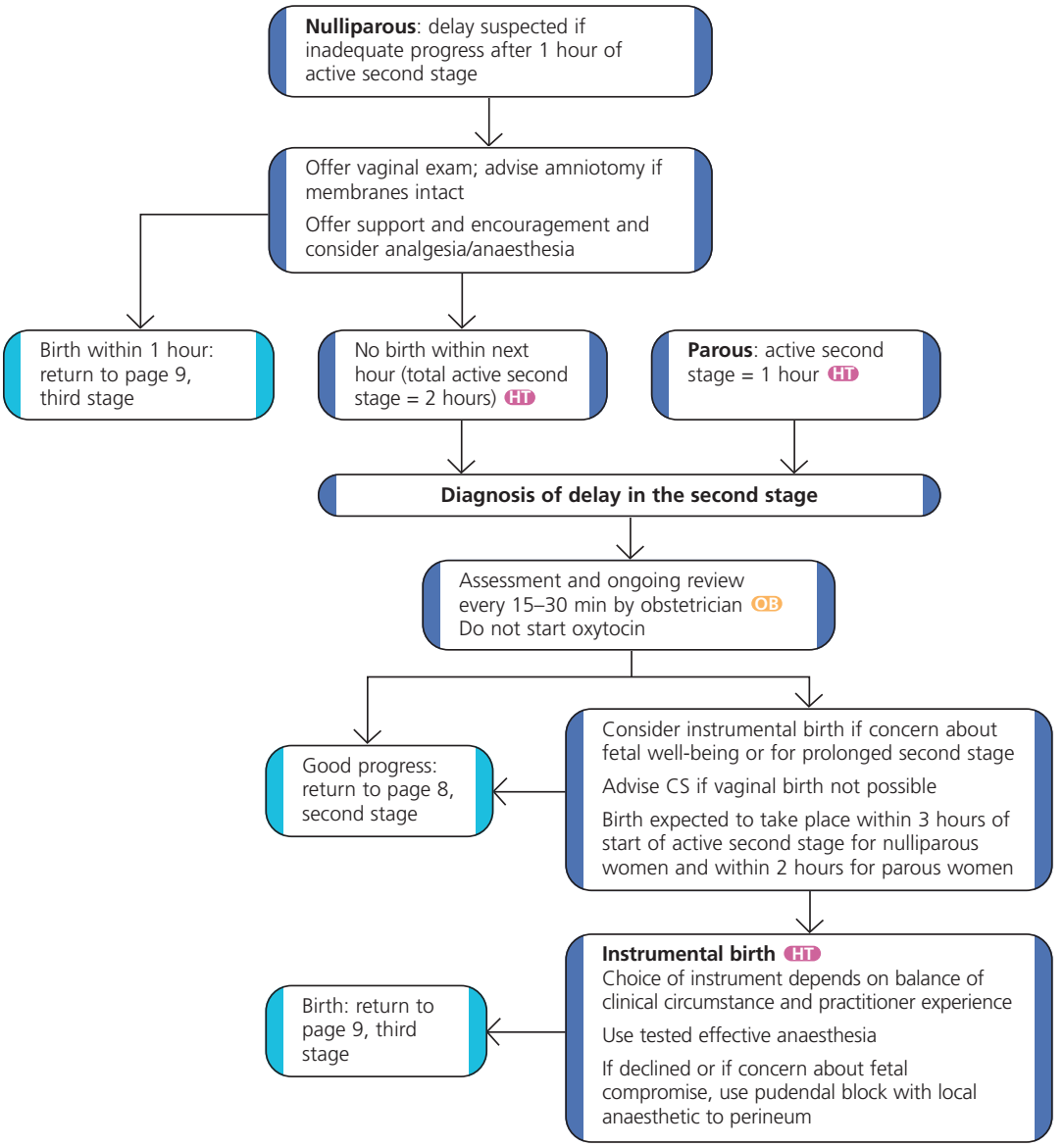
Complications

Delay in the first stage



[1] See 'Caesarean section' (NICE clinical guideline 13).

Delay in the second stage



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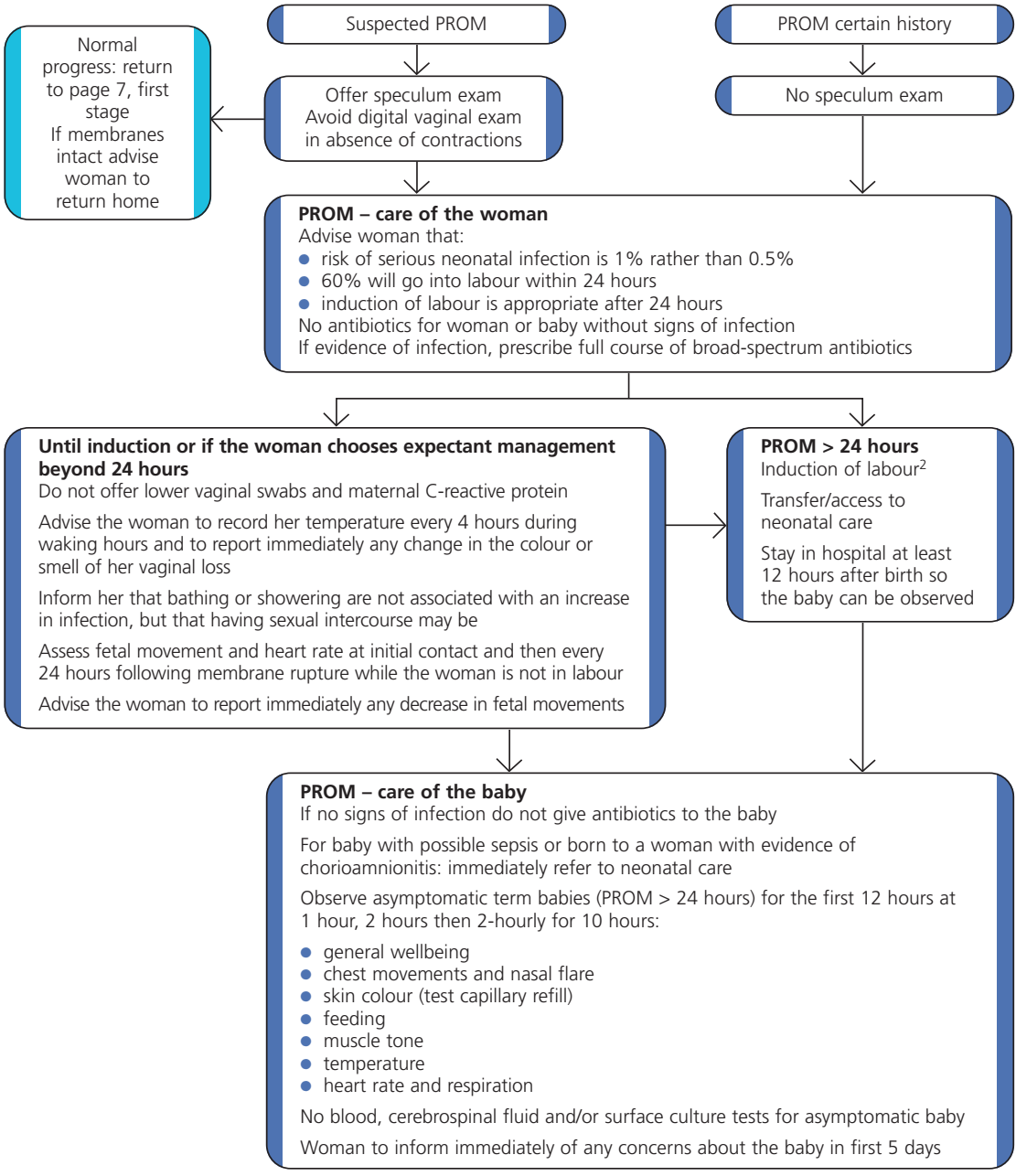
Prelabour rupture of the membranes (PROM) at term



[2] Care of women who have their labour induced is covered by 'Induction of labour' (NICE inherited clinical guideline D).

Meconium-stained liquor

Light meconium-stained liquor

Consider continuous EFM based on risk assessment: stage of labour, volume of liquor, parity, FHR, transfer pathway; see pages 17–18

Baby in good condition
1 and 2 hours, observe:
- general wellbeing
- chest movements and nasal flare
- skin colour (test capillary refill)
- feeding
- muscle tone
- temperature
- heart rate and respiration

Review by a neonatologist if baby's condition causes concern at any time

Significant meconium-stained liquor
Dark green or black amniotic fluid that is thick or tenacious, or any meconium-stained fluid containing lumps of meconium OB

Advise continuous EFM, see pages 17–18

FBS available in labour and advanced neonatal life support available for birth

Do not suction nasopharynx and oropharynx before birth of the shoulders and trunk

Suction upper airways only if thick/tenacious meconium in oropharynx

Baby has depressed vital signs
Laryngoscopy and suction under direct vision by a healthcare professional trained in advanced neonatal life support

Baby in good condition
1 hour, 2 hours then 2-hourly until 12 hours old, observe:
- general wellbeing
- chest movements and nasal flare
- skin colour (test capillary refill)
- feeding
- muscle tone
- temperature
- heart rate and respiration

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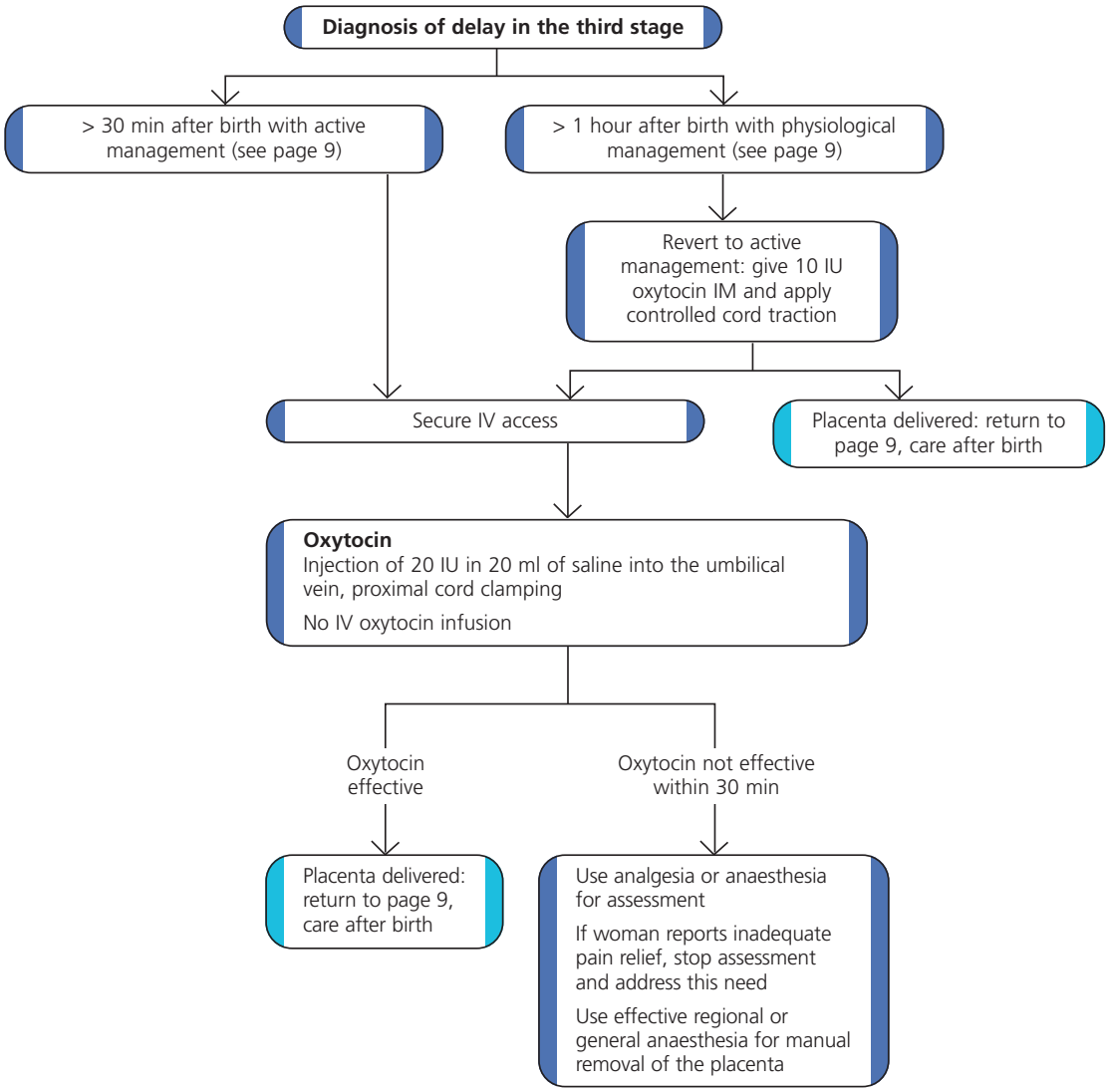
Retained placenta OB



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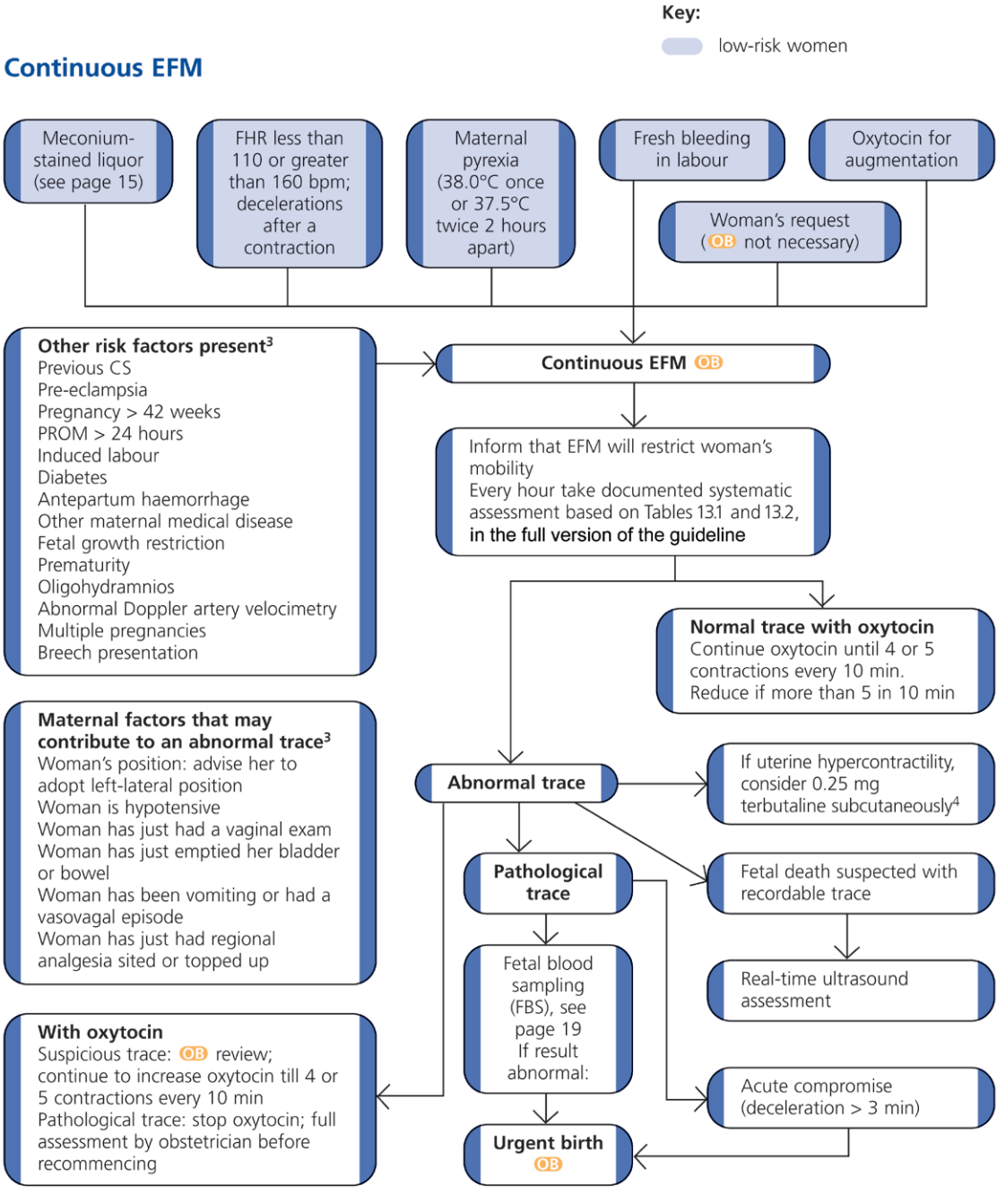
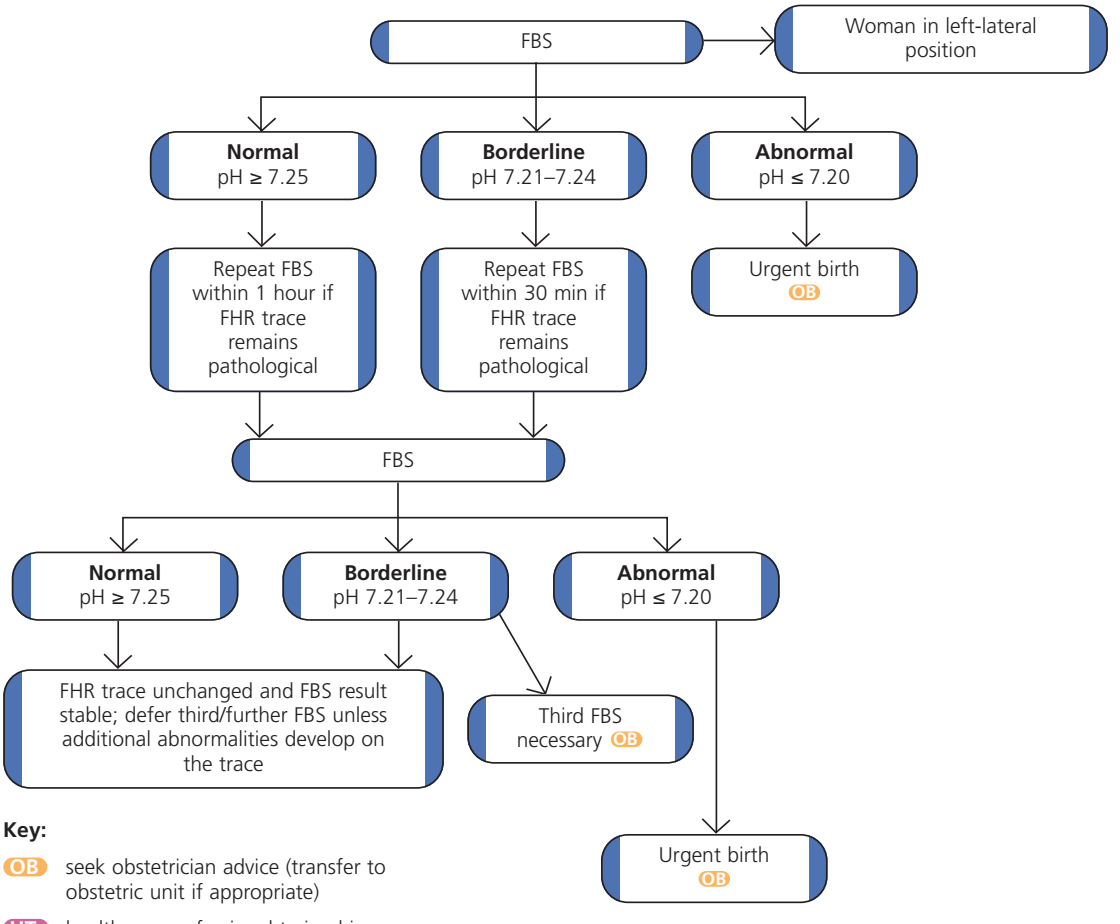
Continuous EFM



[3] These factors (risk factors for women outside the scope of this guideline and maternal factors that may contribute to an abnormal trace) are from 'Electronic fetal monitoring' (NICE inherited guideline C) which this guideline updates and replaces.
[4] At the time of publication (September 2007), terbutaline did not have UK marketing authorisation for this indication. Informed consent should be obtained and documented.

Fetal blood sampling (FBS)



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Neonatal resuscitation

- Start basic resuscitation of newborn babies with air.
- Use oxygen for babies who do not respond.
- Attend a neonatal resuscitation course at least once a year[5].

[5] Consistent with the algorithm adopted in the 'Newborn life support course' developed by the Resuscitation Council (UK), available from www.resus.org.uk/siteindx.htm

Postpartum haemorrhage

Risk factors for postpartum haemorrhage

Antenatal risk factors for which women should be advised to give birth in an obstetric unit:
- previous retained placenta or postpartum haemorrhage
- maternal haemoglobin level below 8.5 g/dl at onset of labour
- increased body mass index
- 4 or more previous babies
- antepartum haemorrhage
- overdistention or abnormalities of the uterus
- low-lying placenta
- woman 35 years or older

Risk factors in labour:
- induction
- prolonged first, second or third stage of labour
- oxytocin use
- precipitate labour
- operative birth or CS

→ Have strategies in place to respond quickly and appropriately to a postpartum haemorrhage
Highlight risk factors in the notes
Plan and discuss care

Managing postpartum haemorrhage

Immediate treatment:
- call for help OB
- uterine massage
- IV fluids

→ Uterotonic options:
- repeat bolus of oxytocin (IV)
- ergometrine (IM/cautiously IV)
- IM oxytocin with ergometrine (Syntometrine)
- misoprostol[6]
- oxytocin infusion (Syntocinon)
- carboprost (IM)

↓ Additional treatment options:
- tranexamic acid (IV)
- rFactor VIIa on advice from haematologist[6]

Key:

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[6] At the time of publication (September 2007), misoprostol and rFactor VIIa did not have UK marketing authorisation for this indication. Informed consent should be obtained and documented; however, if this is not possible, follow the Department of Health guidelines 'Reference guide to consent for examination or treatment' (2001) (available from www.dh.gov.uk). It may be appropriate to get consent in the antenatal period.