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# **Management of labour (stage 2 and 3) and Fetal wellbeing assessment during labour**

reference textbook  
Obstetrics by ten teachers  
20<sup>th</sup> ed (2017),ch 12, pp:393-404

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# MANAGEMENT OF THE SECOND STAGE

- **When the mother reach the active 2<sup>nd</sup> stage and has urge to push she adopts a lithotomy position, or left lateral position, or semi sitting position.**
  - **the pushing should be organized with the contractions to be effective.**
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- **When you notice the crowning (the head passed the pelvic floor and under the pubic arch, delivery is imminent).**
  - **Use the modified Ritgen's manoeuvre: for the delivery of the head.**
  - **The goals of assisted spontaneous vaginal delivery are reduction of maternal trauma, prevention of fetal injury, and initial support of the newborn**
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# Episiotomy

**Episiotomy is an incision into the perineal body to enlarge the vulval outlet and facilitate delivery:**

**1- Midline episiotomy**

**2-Mediolateral episiotomy**

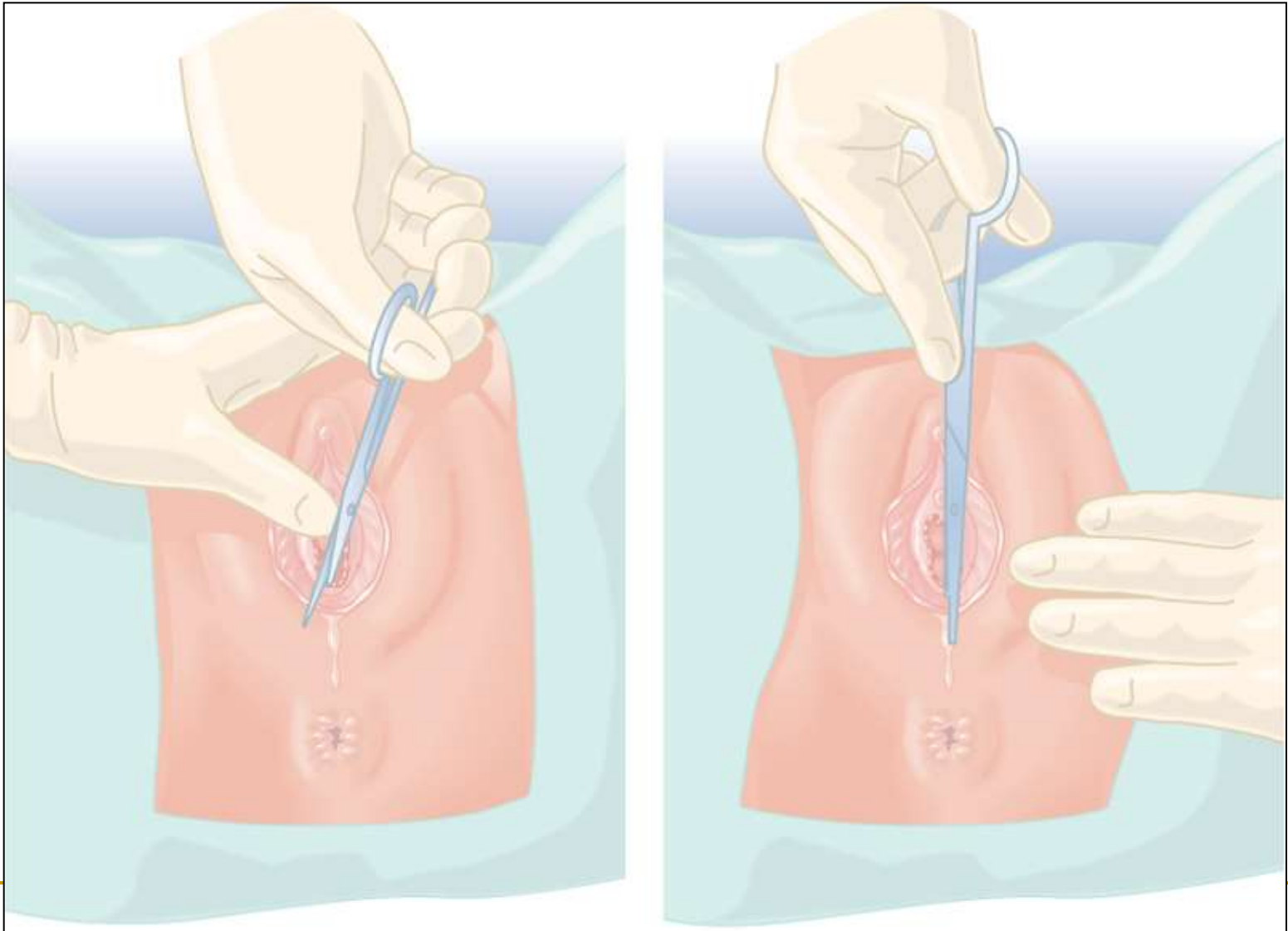
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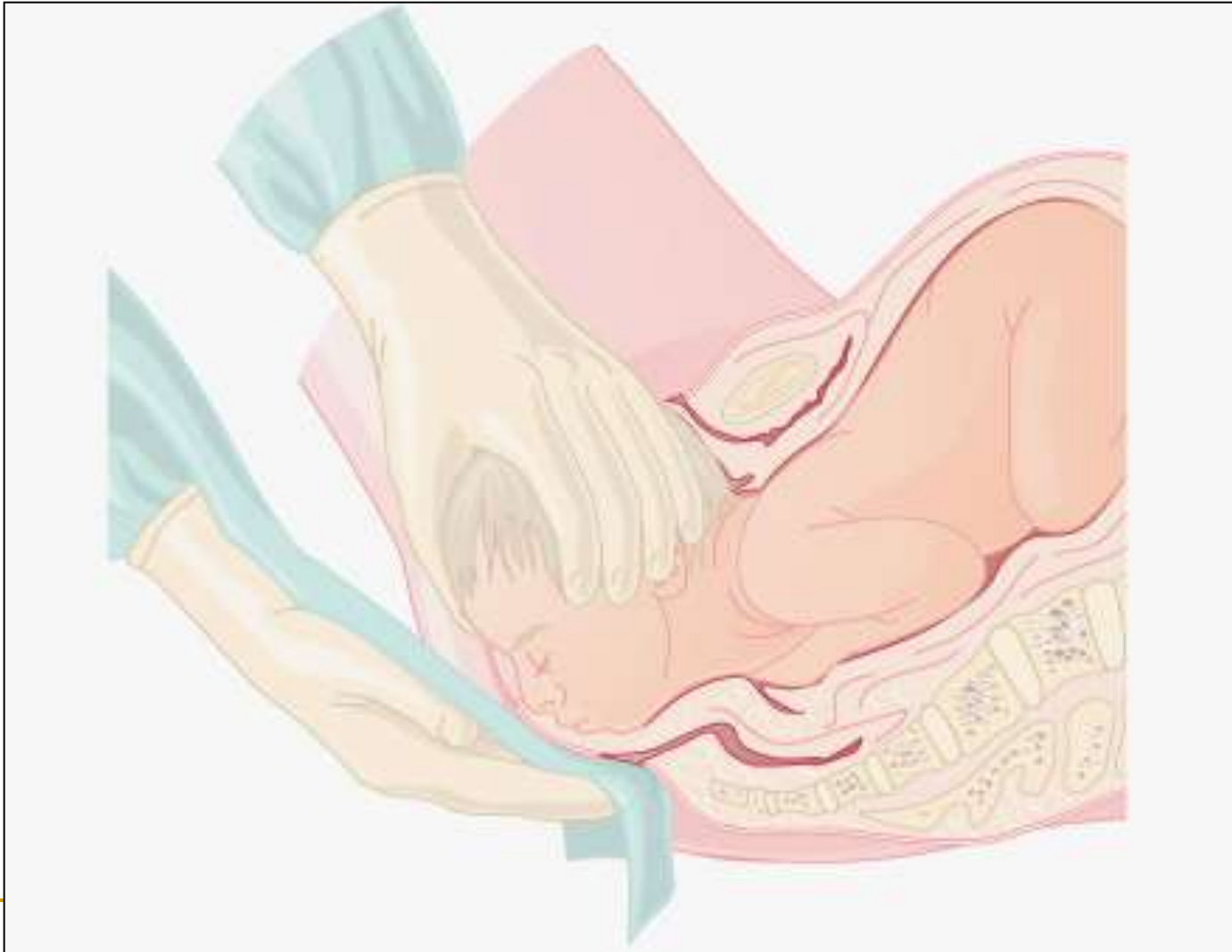
## MANAGEMENT OF THE SECOND STAGE

- **After head delivery**
  - **Then the delivery of the shoulders then the delivery of the rest of the body**
  - **Delay cord clamping to get about 80 ml of placental blood → neonatal anemia**
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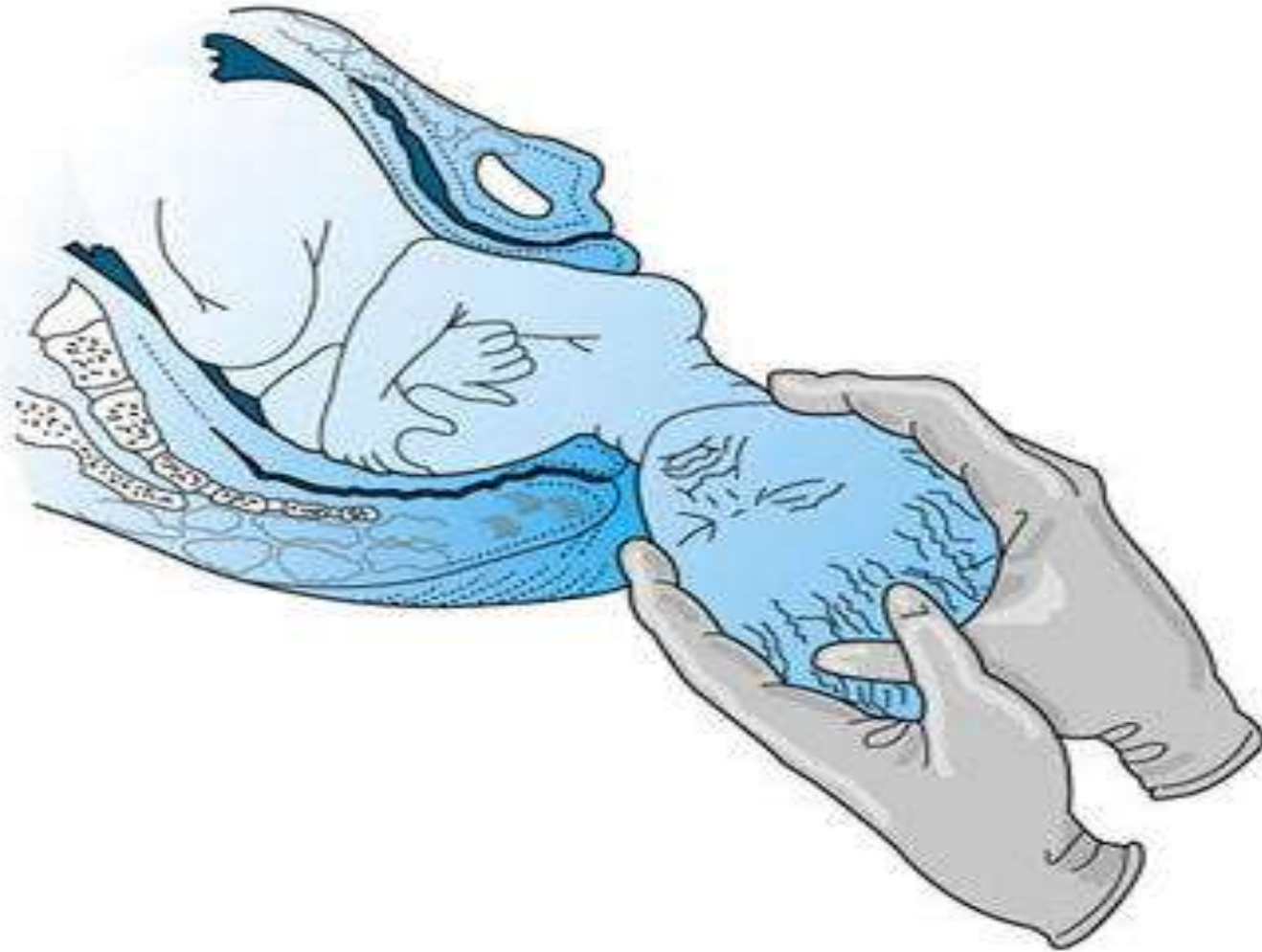
# EPISIOTOMY



# Perineal support for delivery of head



**??? With this step give oxytocin 10 IU injection i.m for active management of 3<sup>rd</sup> stage**







# **MANAGEMENT OF THE THIRD STAGE**

- **Placental separation occurs as a result of reduction of the volume of the uterine cavity by the contractions and retraction**
- **A cleavage plane developed within the decidua basalis and the placenta lies free in the lower uterine cavity.**
- **Management either**
  - A- active**
  - B- physiological**

## active management of the 3rd stage

- 1. Give 10 units oxytocin or syntometrin with the delivery of the anterior shoulder to induce uterine contractions immediately after the delivery of the baby.**
- 2. 1-3 minutes after baby's delivery; clamping of the cord**

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**3. Controlled cord traction to deliver the placenta and membranes. never pull the cord when the uterus is not contracted → risk of uterine inversion**

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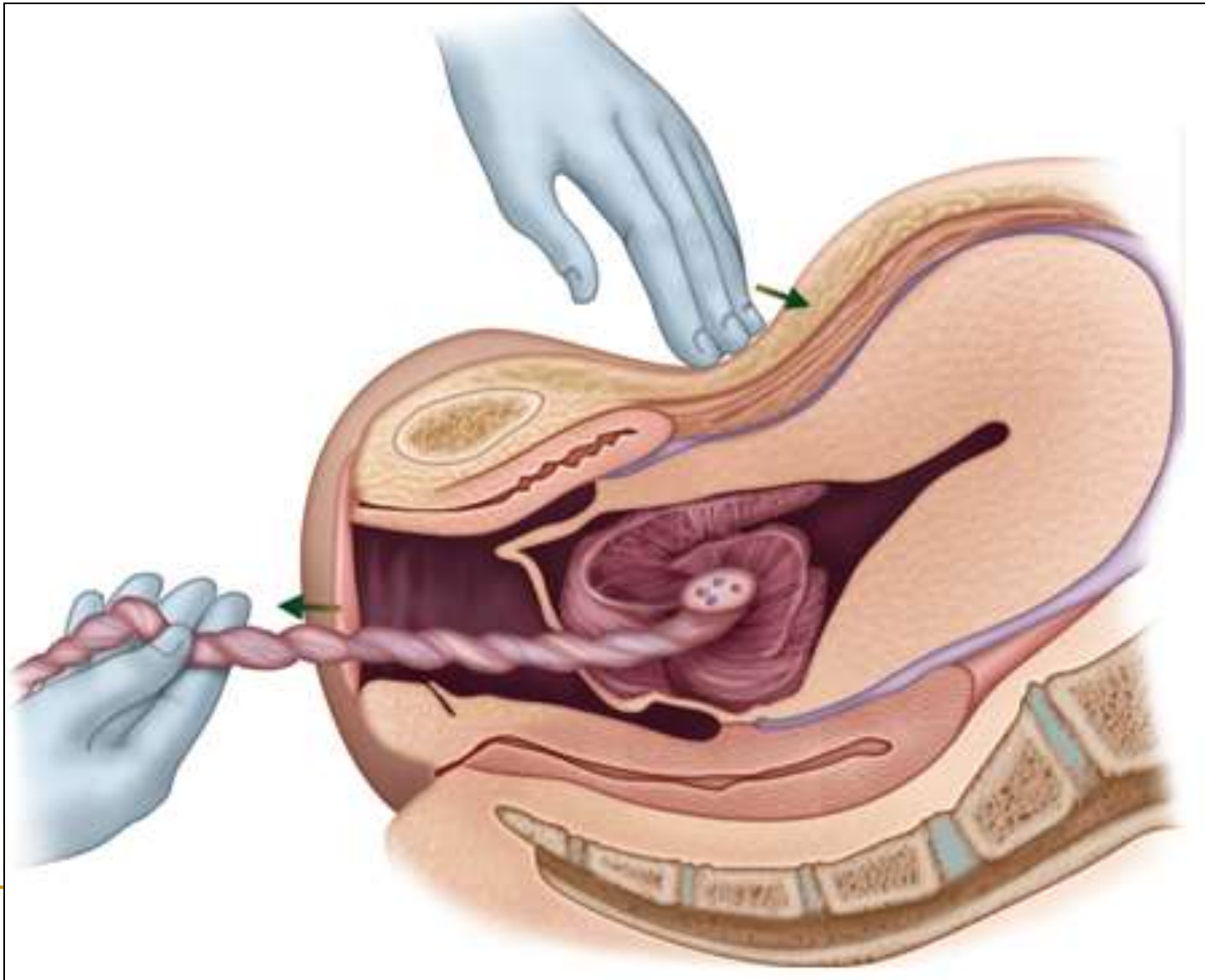
# **Aim of active management**

**Active management of the 3<sup>rd</sup> stage**

**a- shortens the 3<sup>rd</sup> stage**

**b- and reduce the risk of postpartum haemorrhage from 15% to 5%**

# Controlled cord traction



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- **After placental delivery it should be inspected for any lost cotyledons or succenturiate lobe.**
  - **Finally the vulva must be inspected for any tears or lacerations in order to repair them.**
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# **Fetal assessment**

**During labour uterine perfusion is dramatically reduced during each contraction, and fetal assessment is very important because labor is very stressful condition.**

**the use of operative delivery for 'non reassuring fetal status' remains to occur every day in delivery wards.**

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# Aim of fetal monitoring

**The aim of monitoring of fetal well-being during labour is to prevent birth asphyxia and so reduce perinatal mortality, neonatal intensive care unit (NICU) admissions at term, umbilical cord acidosis (pH <7.2) and base deficit >12 mmol/L, low Apgar scores, neonatal hypoxic ischaemic encephalopathy at term, and long-term handicap.**

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- One of the best methods available for detection of fetal wellbeing is the FHR because the **FHR** change with condition of the fetus → **screening test**
  - **Diagnostic is fetal blood PH** which found that only 35% of fetuses with abnormal FHR are really acidotic
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# **Methods of assessing FHR:**

**1- intermittent auscultation.**

**2- Continuous electronic fetal monitoring**

**A- External by CTG**

**B- Internal by FSE**

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# Monitoring the fetus during labor

**There is probably little value in continuous EFM (electronic fetal monitoring) in low-risk pregnancies.**

**Such women may have a short (20 minutes) CTG recording on admission to the labor ward.**

**If the CTG is normal thereafter the fetal heart is listened to every 15 minutes with a Pinard stethoscope /or sonicaid.**

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The presence of any of the following risk factors at the onset of labour would label a fetus as being at **'high risk'** of intrapartum hypoxia, for which continuous fetal monitoring (EFM) should be offered:

- hypertension /pre-eclampsia,
  - diabetes,
  - antepartum haemorrhage (APH),
  - significant maternal medical disease,
  - intrauterine growth restriction (IUGR),
  - preterm gestation,
  - isoimmunization,
  - multiple pregnancy,
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- **If a fetal heart abnormality is recorded with the Pinard stethoscope/sonicaid.**
  - **breech presentation,**
  - **previous caesarean section,**
  - **Women who develop meconium staining of the amniotic fluid during labor & those with significant meconium staining of the amniotic fluid.**
  - **pre-labour rupture of membranes for >24 hours,**
  - **oligohydramnios abnormal umbilical artery Doppler studies,**
  - **post-term pregnancy,**
  - **epidural analgesia,**
  - **induced or augmented labour.**
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# Fetal heart rate changes during labour

- Accelerations → normal

- Decelerations

A- early → physiological → head compression

B- **late** → may be pathological → acidosis

C- variable → cord compression

- Tachycardia →  $> 160$

- **Bradycardia** →  $< 100$

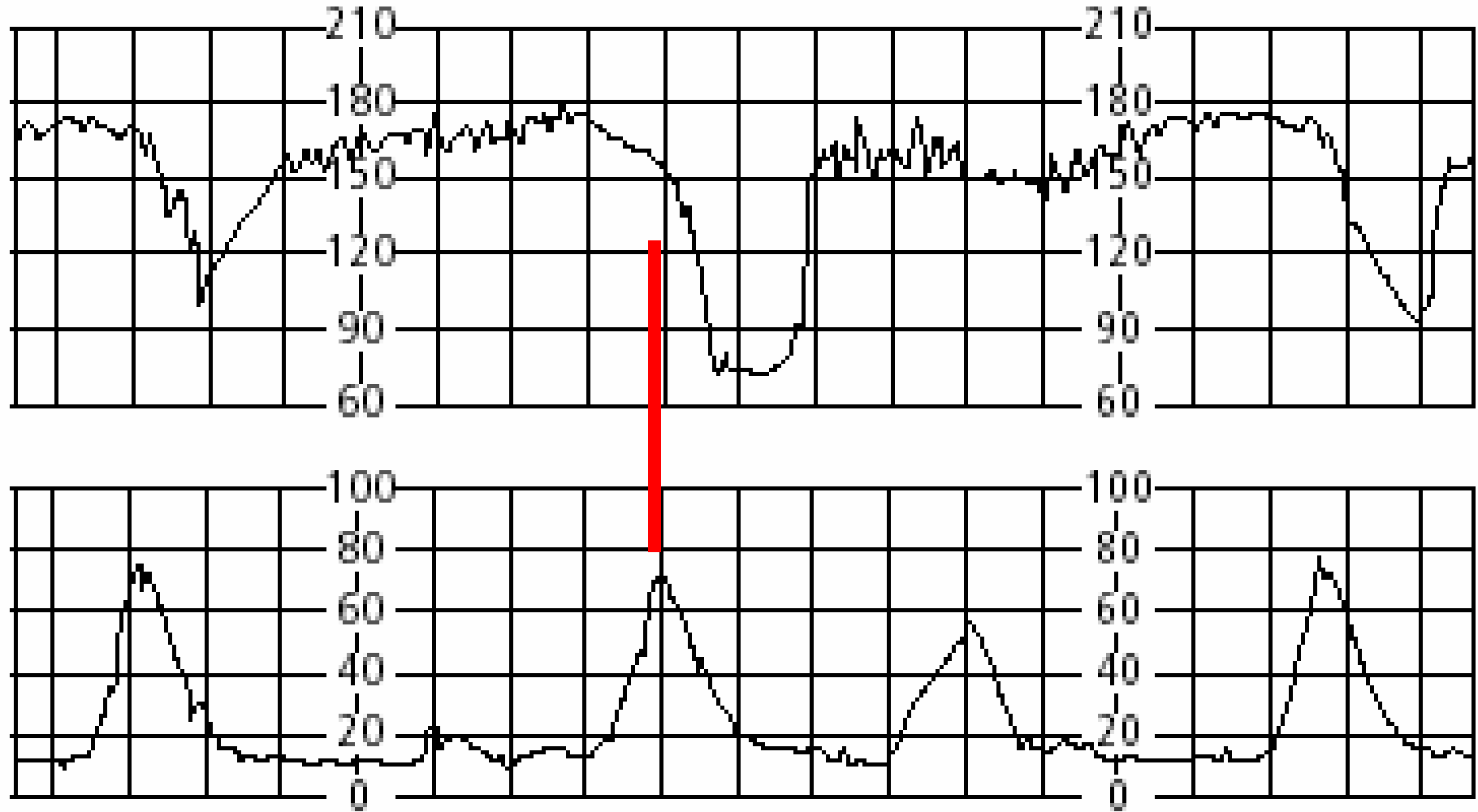
# Early deceleration



Figure 29.2 Early decelerations



# Late deceleration



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# meconium

**Passage of meconium due to**  
**Stimulation of the vagus in utero causes the fetal gut to contract and the anal sphincter to relax so that meconium (fetal stool) is passed into the amniotic fluid.**  
**If it associated with normal FHR → NOT sig**

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# **Fetal blood sampling**

**Fetal blood sampling is a diagnostic test for fetal acidosis.**

**The PH results are interpreted as follows:**

- PH  $>7.25$ : normal.**
  - PH 7.21–7.24: pre-asphyxia.**
  - PH  $<7.20$ : asphyxia.**
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# Other tests

- **Scalp stimulation**
  - **Fetal pulse oximetry**
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