Antenatal examination

Instructions for student:

Mrs Rebecca Kennedy attends the antenatal clinic at 34 weeks gestation. Please examine her abdomen and explain to the examiner what you are looking for at each stage.

Briefly summarise your findings to the examiner.
Instructions for patient:

- No abdominal pain
- 34 weeks gestation
Instructions for examiner:

Examine for:

Introduction
- Wash hands
- Introduces self, explains examination and gains consent
- Exposes patient appropriately – xiphisternum to public symphysis
- Positions patient appropriately- semi-recumbent NOT lying flat.
- Asks patient: ‘do you have any pain in your tummy?’ and ‘how many weeks pregnant are you?’

Inspection
- Looks for abdominal distension – 5 F’s fat, fluid, flatus, faeces, fetus.
- Fetal movements
- Scars: previous Caesarean section, laparotomy, laparoscopy.
- Cutaneous signs of pregnancy:
  • Linea nigra
  • Striae gravidarum
  • Striae albicans – sign of previous parity
  • Umbilical inversion – sign of increased intra-abdominal pressure
  • Dilated superficial veins – collateral flow due to pressure on IVC

Palpation
- Fundal Height
  • Tells patient: ‘I’m going to feel for the top of your womb’
  • Uses left hand, starts at xiphisternum
  • Work down until fundus is located
  • Place end of tape measure here
  • Measure to pubic symphysis with measurements facing downwards.
  • Pinch tape measure at pubic symphysis and turn over to obtain measurement – fundal height in cm +/- 3 = weeks’ gestation after 20 weeks.
- Fetal Lie (and number of foetuses)
  • ‘I am now going to feel for your baby’
  • Watches patient’s face throughout – to ensure not causing any pain
- One hand on each side of the uterus
- Apply gentle pressure with the left hand – stabilises fetus
- With right hand feel for firm, curved fetal back or lumpy fetal limbs
- Apply pressure with right hand and feel with left as above.

- Presenting Part
  - ‘I’m going to feel deeply for the baby; if this is painful please tell me’
  - Continue to watch patient’s face
  - One hand each side of the lower uterus, just above the pubic symphysis
  - Apply firm pressure with both hands
  - Decide if hard, narrow and round (head) or soft and broad (bottom)

- Engagement of the head
  - Determine cephalic presentation as above
  - Approximate how many fingers breadths are needed to cover the head above the pelvic brim.
  - Describes as number of ‘fifths’ of the head palpable. - <3/5 palpable = engaged.

Auscultation

- Consider fetal lie and palpate anterior shoulder
- Pinard stethoscope: place bell over anterior shoulder, presses firmly but gently, put ear to other end. Auscultate for 1 minute.
- Doppler Ultrasound:
  - Smear jelly on probe – warn patient it will be a little cold
  - Place probe over anterior shoulder
  - Adjust angle until clear heartbeat heard – listen for 1 minute(normal 120-140bpm)

Legs

- Peripheral oedema- can occur physiologically or in pre-eclampsia

Concluding Remarks

- Cardio-respiratory examination
- Blood pressure – pre-existing hypertension, gestational hypertension, pre-eclampsia
- Urinalysis – proteinuria, glycosuria
- USS
- CTG if abnormal fetal heart rate.
- Chart SFH on growth chart -

Allow student to present findings then ask the following questions:
1. Although this woman is 34 weeks gestation, her symphysiofundal height is 40cm. This is large for dates. What is your differential diagnosis of a large for dates baby?
   - Constitutionally large for dates, polyhydramnios, inaccurate dating, multiple pregnancy, macrosomia, hydrops fetalis.

2. What is the definition of a large for dates baby?
   - A fetus with a corrected birthweight >95\textsuperscript{th} centile for gestational age – corrected for gestation, sex of baby, maternal height and weight, ethnic origin

3. If you suspected a large for dates baby, what clinical examinations/investigations would you perform?
   - Abdominal examination would assess liquor volume – hard to feel fetal parts/tense uterus, Glucose tolerance test for gestational diabetes, USS – confirm large for dates by measure BPD and abdominal circumference, measure liquor volume, exclude multiple pregnancy, look for evidence of fetal hydrops, Rhesus state and antibodies
   - Consider showing the student a SFH chart that midwives use routinely to chart growth and identify SFD or LFD babies and THEN ask them how you would investigate small or large babies.