

## 14c. Part 2. Per abdomen - Obstetric Abdominal Examination

### Obstetric Abdominal Examination: An OSCE-Ready, Step-by-Step Guide

#### Aim and scope

A practical, systematic approach to examining the pregnant abdomen—covering preparation, positioning, inspection, palpation (lie, presentation, engagement), symphyseal-fundal height (SFH), fetal heart localisation, and safe completion.

#### Equipment

- Measuring tape
- Pinard stethoscope (or Doppler)

#### Before you begin

- **Hand hygiene & PPE:** introduce yourself and confirm identity.
- **Explain:** “I’ll look at and feel your tummy and take some measurements; it shouldn’t be painful—tell me to stop anytime.”
- **Chaperone:** offer and proceed with consent.
- **Position:** start semi-recumbent (30–45°); **offer to pass urine first; ask about pain** and proceed gently. **Expose** from xiphisternum to pubic symphysis, preserving dignity.

#### General inspection (at the end of the bed)

Look for overall comfort/pain, surgical **scars** (e.g., Pfannenstiel), **pallor, jaundice** (think obstetric cholestasis), and **oedema** (local vs widespread—if face/hands/legs are involved, consider pre-eclampsia). Scan the area for **charts** (vitals, fluids) and medications that hint at current issues.

#### Hands & pulse

- **Colour, oedema, palmar erythema:** assess **temperature** (perfusion) and **capillary refill time** (<2 s normal).
- **Radial pulse:** rate/rhythm; expect a slightly higher baseline HR in pregnancy (often 80–90 bpm).

#### Face

Check for **jaundice, melasma, facial oedema**, and **conjunctival pallor** (anaemia).

#### Safe positioning and why it matters

- **Early pregnancy:** supine with slight head elevation (15–30°).
- **Late pregnancy:** **left-lateral tilt (~15°)** to avoid **aortocaval compression** (syncope, hypotension, fetal compromise).

## Abdominal inspection

Expose from xiphisternum to pubis and note:

- **Abdominal shape** (first clue to fetal lie) and **visible fetal movements** (typically  $\geq 24$  weeks).
- **Scars, linea nigra, striae gravidarum** (reddish) and **striae albicans** (silvery, mature).

## Abdominal palpation (start with tenderness check)

### 1) Light screen palpation

Briefly palpate the **nine regions** to identify non-obstetric tenderness/masses (e.g., appendicitis).

### 2) Define the uterus

Trace the **upper and lateral borders**; typical fundal level landmarks:

- **12 wk**: at the **pubic symphysis**
- **20 wk**: at the **umbilicus**
- **36 wk**: near the **xiphoid process**

### 3) Determine fetal lie (sides of uterus)

Facing the patient, place hands on each side: a **smooth, firm "back"** on one side; **limbs** on the other.

- **Longitudinal** (normal), **oblique**, or **transverse** lie.

### 4) Identify presentation (lower pole)

Hands just above the pubic symphysis, apply firm, medial pressure:

- **Cephalic**: hard, round, ballotable head.
- **Breech**: broader, softer, less defined. Warn this may be briefly uncomfortable.

### 5) Assess engagement (late pregnancy)

Divide the head into "fifths" palpable abdominally:

- **5/5** palpable = not engaged; **0/5** palpable = fully engaged.

## Measuring Symphyseal-Fundal Height (SFH)

From **upper pubic symphysis** to **fundus** in **cm**: after **20 weeks**, SFH  $\approx$  gestational age  $\pm 2$  cm.

Tips: locate fundus with the **ulnar border** of your hand; keep the **tape face down** to avoid bias; record the value.

## Locating the fetal heartbeat (Pinard/Doppler)

- Use your lie/presentation findings to **aim over the fetal back** (between the shoulders).
- **Palpate maternal radial pulse** simultaneously to avoid mistaking uterine flow for fetal heart.
- With a Pinard, apply **gentle** pressure for a good seal; too much is uncomfortable, too little is inaudible.



## To complete the examination

- Explain you've finished; thank the patient; PPE off; hand hygiene.
- **Summarise:** lie, presentation, engagement, SFH, fetal heart (if assessed).
- **Next steps if needed:** blood pressure and **urinalysis** (proteinuria) for pre-eclampsia screen, ultrasound (position/well-being), speculum if bleeding/PPROM, plus weight/height as indicated.

## Red flags you shouldn't miss

- **Aortocaval symptoms** when supine (reposition immediately).
- **Widespread oedema**, hypertension, or **proteinuria** → suspect **pre-eclampsia**.
- **Jaundice with pruritus** (palms/soles) → consider **obstetric cholestasis**.
- **Abdominal tenderness** out of proportion to exam or **vaginal bleeding** → urgent obstetric review.

## OSCE talk-through (concise template)

"I examined a comfortable, late-third-trimester patient with no facial or peripheral oedema. Abdomen showed linea nigra and healed Pfannenstiel scar. Uterus was palpable to the xiphisternum; lie **longitudinal; cephalic** presentation; head **3/5** palpable (part-engaged). **SFH 36 cm**, correlating with gestation. Findings are consistent with a normal obstetric abdominal exam. I'd complete by checking **BP/urine** for protein and confirm **fetal heart** and position with **ultrasound** if required."

## Quick checklist (memorise)

- Hygiene, intro, consent, **chaperone**, pain, bladder empty, exposure.
- General look: scars, pallor/jaundice, oedema; hands/CRT/pulse; face.
- **Position** (left-lateral tilt in late pregnancy).
- Inspect abdomen (shape, movements, linea/striae).
- Palpate: screen abdomen → define uterus → **lie** → **presentation** → **engagement**.
- **SFH** (cm  $\approx$  weeks  $\pm$  2).
- **Fetal heart** over the back; distinguish from maternal pulse.
- Close; **summary**; targeted **investigations**.

Adapted for teaching from the Geeky Medics Obstetric Abdominal Examination OSCE Guide.