



## Case: Antepartum Haemorrhage

### Candidate brief

You are a FY2 in the A+E department.

Please take a focused history from Miss Charlotte Lane, a 38-year-old female who presents to A+E.

15 mins	<ol style="list-style-type: none"><li>1. Please take a full history (7 mins)</li><li>2. Counsel her with an appropriate management plan (4 mins)</li><li>3. Viva with the examiner afterwards (4 mins)</li></ol>
10 mins	<ol style="list-style-type: none"><li>1. Please take a full history (7 mins)</li><li>2. Viva with the examiner afterwards (3 mins)</li></ol>

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## Patient Brief

(Do not volunteer information unless asked)

**Name:** Charlotte Lane

**DOB:** 23/09/1982 (38 years old)

**Job:** Secondary school mathematics teacher

**Opening statement:**

“My partner brought me to A+E because I have severe tummy pain”

**HPC:**

- Site: **Generalised abdominal pain**, worse in lower abdomen
- Onset: **sudden onset** 3hrs ago (started at 6am)
- Character: **Feels like the contractions** you had with your other 2 pregnancies. You also have a background ache
- Radiation: Lower back
- Associated symptoms: **PV bleeding** – noticed when you woke up in pain this morning, dark blood, enough to soak two sanitary pads, no clots.
  - You feel light-headed and **clammy**.
- Timing: constant ache with frequent ‘contractions’
- Exacerbating and relieving factors: nil
- Severity: **8/10** severe pain

**Associated symptoms**

- See above

**Obs Hx**

- **Gravid 4, parity 2.**
- 2 previous pregnancies: 1<sup>st</sup> Spontaneous vaginal delivery at 38+1 weeks; 2<sup>nd</sup> child born via **C section** at 40+3 weeks due to prolonged labour. Both babies born of normal weight and had no neonatal complications.
- **Previous miscarriage 1 year ago** at 10 weeks.
- This pregnancy, singleton, **gestation 29+1**. You took 12 weeks of folic acid supplements. Attended all USS screening and antenatal appointments, with no issues. Foetal movements have been regular, not sure whether she has felt the baby move this morning.

**Gynae Hx**

**Period: Last menstrual period:** around 8 months ago (prior to pregnancy)

- Periods are regular, normally 29 day cycles
- No history of dysmenorrhea or menorrhagia
- Age of menarche: 12 years olds

**Smears:** Last smear 2019 – normal. Attended all her previous appointments with no abnormalities detected.

**STIs:** Chlamydia when she was 23 years old, which she was treated for and resolved.

**Contraception:** No current contraception. Previously used condoms.



**PMHx** – Hyperthyroidism

**DHx** - NKDA, Carbimazole

**FHx** – Sister diagnosed with gestational diabetes in last pregnancy.

- Father had an MI at the age of 48yrs.

**SHx** –

- You live with your partner, George, and your two children (Lizzie, 7 and Evan, 4)
- You are a secondary school teacher (Maternity leave due in 4 weeks) which you find very stressful
- Struggled to stop smoking– **currently** you **smoke 5 cigarettes/day**
- Teetotal since becoming pregnant
- No illicit drug use

**Other information:**

- Other systems review - normal

**Ideas:** You believe you have gone into an early labour, but something has ‘gone wrong’

**Concerns:** You are scared of losing this baby. You and your partner have been trying for 3 years to get pregnant. You do not want to deliver the baby yet as you are only 29 weeks pregnant.

**Expectations:** Would like the doctor to stop your ‘labour’ and keep your baby alive.



**Investigations findings** (Provide it after history talking or give when the candidate asks for the specific investigation below)

**INVESTIGATIONS:**

Observations: BP 94/70, HR 112, RR 18, SPO2 97% on room air, Temp 37.3 degrees C

BMI – 18kg/m<sup>2</sup>

Speculum Examination – Observe visible bleeding from cervical OS and blood in the vaginal canal

Bimanual Examination – Palpation of the uterus elicits pain and the uterus feels hard.

USS: No abnormalities detected.



## Examiner Brief

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10 mins	<ol style="list-style-type: none"> <li>1. Please take a full history (7 mins)</li> <li>2. Viva with the examiner afterwards (3 mins)</li> </ol>

- **Please do not provide any verbal or non-verbal feedback** for the candidate. This includes nodding to correct answers and shaking head to wrong answers - particularly during the viva.
- **Please provide positive and negative feedback** (both verbal and written) at the end of the session once the examination is complete.
- The questions below are provided as a guide for discussion only. For viva, please ask questions surrounding the case and challenge the candidate where appropriate

Examiners will grade the performance across four domains: **(15 minute station)**

1. Clinical skills

2. Formulation of clinical issues

3. Discussion of management

4. Professional behaviours and patient centred approach

Positive descriptors	Marks
History/Clinical skills (18)	
Appropriate introduction, elicit patient details and invite consultation	2
<b>Pain – with SOCRATES</b>	3
<b>Bleeding:</b> Onset, Volume, Colour and clots	2
<b>Menstrual history</b> – age at time of menarche, LMP, regularity of periods and characteristics	2
<b>Gynaecological</b> history –STIs, cervical screening	2
<b>Obstetric</b> history – Gravity, Parity, outcome of pregnancies, current foetal movements, any problems during current/previous pregnancies	3
Enquire about <b>risk factors:</b> BMI, smoking, illicit drug use, clear obstetric history	2
Past medical (surgical) history; drug history, family history, social history	1
Formulation of clinical issue (5)	
Summary and <b>interpretation</b> of clinical findings <b>accurately</b>	2
Good range of differential diagnoses	1
Viva	2
Discussion of management (4)	
Build patient concerns into plan and Justify choice of investigations	2
Demonstrate good understanding of the A-E approach	1
Viva (Management)	1
Professionalism and patient centered approach (3)	
Able to elicit patient ideas, concerns, expectations	1
Use empathic behaviour and language	1
Explain accurately, uses everyday language and check for understanding	1
Professional communication to examiner as colleague	1



**Viva Questions:** (Please ask questions surrounding the case and challenge the candidate where appropriate); **The questions below are provided as a guide for discussion only.**

**Resource:** Antepartum haemorrhage, Green-top guideline No.63 and No. 52

1. Differential diagnosis	Placental abruption, placenta praevia, vasa previa, uterine rupture
2. What examinations and investigations would you like to perform?	Examinations: speculum + bimanual Full set of observations: Assess whether she is in shock ECG as tachycardic (once seen set of observations) Bloods: FBC, U+Es, LFTs, Coagulation screen, Cross-match. Consider VBG for immediate results. If Rhesus-D -ve, a Kleihauer test should be performed USS scan (results above) Cardiotocograph (CTG) monitoring of foetal heart-beat, once mother stable
3. What are the risk factors with placental abruption in this case?	In this case: Low BMI, smoking, maternal age >35, multiparity, previous C-section
4. How would you initially stabilise this patient?	A-E assessment – Stabilise mother as signs of haemodynamic compromise. Seek senior support and request urgent review from on-call obstetrician <ul style="list-style-type: none"> <li>• Oxygen NRB 15L/min</li> <li>• IV access with 2 wide bore cannula</li> <li>• Position in left lateral tilt</li> <li>• Until blood is available, infuse up to 3.5L of warmed fluids. Crystalloid (Hartmann's) solution up to 2L and/ or colloid (1-2L) as rapidly as required</li> <li>• Follow major haemorrhage protocol for transfusion of blood products/ based on lab results</li> </ul>
5. Once Miss Lane is haemodynamically stable, how would you further manage her placental abruption? Follow up if not already mentioned: "what mode of delivery would you opt-for?"	<ul style="list-style-type: none"> <li>• Consider giving a single course of antenatal corticosteroids</li> <li>• Continuous electrical fetal heart rate monitoring whilst senior discussions are had</li> <li>• Senior discussion to decide whether to deliver the foetus – as signs of maternal compromise, then immediate delivery should be commenced. Normally via C-section unless in established labour</li> </ul>
6. What disease would you be most concerned about in the neonate?	<ul style="list-style-type: none"> <li>• Concerned that neonate will be anaemic and therefore plans should be made for a potential neonatal blood transfusion</li> <li>• Neonatal staff should be present at the time of delivery</li> </ul>
7. If Miss Lane presented haemodynamically stable, how might your immediate and long-term management have changed?	<ul style="list-style-type: none"> <li>• Given she was still bleeding when she arrived at hospital, she should be admitted to hospital at least until the bleeding has stopped (for further monitoring)</li> <li>• Immediate delivery may not have been indicated, requiring senior review.</li> <li>• If not delivered, pregnancy would be reclassified as high risk and antenatal care would need to be consultant led. Foetal growth with Serial USS should be performed.</li> </ul>

Is Carbimazole safe to use in pregnancy? Which trimester do they recommend using it from?  
Are there any requirements for monitoring?