



## Case: PCOS

### Candidate brief

You are a 4<sup>th</sup> Year Medical Student on your GP rotation.

Please take a focused history from Miss Eleanor Tiles, a 23-year-old female who has presented with irregular bleeding.

8 mins	<ol style="list-style-type: none"><li>1. Please take a full history (6 mins)</li><li>2. At 6 minutes, present to your examiner and the examiner will ask you some questions (2 mins) (These usually consist of 1: what are your differential diagnoses? 2: What investigations and/or management plan/next steps would you like for this patient)</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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Reviewers: Dr Amelia Seifalian, FY1, Essex, Bedfordshire and Hertfordshire (EBH) Deanery, Dr Sivarajini Inparaj, Foundation Doctor, Peninsula Deanery



## Patient Brief

(Do not volunteer information unless asked)

**Name:** Miss Eleanor Tiles

**DOB:** 06/09/1997 (23 years old)

**Job:** Works in sales for a financial technology company.

**Opening statement:** *"I've been having really irregular periods and it's starting to interfere with my life"*

### HPC:

Irregular Bleeding:

- **Started around 6 months ago**
- Used to be really regular when she was on the pill
- **Now bleeding for around 2-3 days but with additional inter-menstrual bleeding**
- Fairly heavy when she is on, changes pads every 2-3 hours, however she doesn't have to double up with pads and a tampon
- Inter-menstrual bleeding tends to be lighter
- Not currently bleeding
- No abdominal pain
- **No clots**
- Not sure how long her cycle is, seems to be always changing. Sometimes 1-2 'periods' a month but sometimes longer gaps in between

### Associated symptoms

- Has some **Hirsutism** around the face
- Spots on her face due to **acne**
- Has also experienced **weight gain**, she is finding this upsetting.
- No hot flushes, skin changes, weight loss, tiredness, exertional breathlessness or myalgia
- Not associated with bladder or bowel symptoms. No constipation. No striae if asked
- No post-coital bleeding or dyspareunia

### Obs Hx

- 0 pregnancies in the past and when asked, there is no chance she could be pregnant now. G0P0

### Gynae Hx

**Period: Last menstrual period:** Two weeks ago

- Generally not painful although she gets occasional cramps.

**Smears:** N/A

**STIs:** Not that she is aware of. Has never had formal testing.

**Contraception:** Currently none. **She was on the COCP for 4 years, stopped 6 months ago** as she split up with her boyfriend.



**PMHx – Acne**, treated with topical antibiotics, it is better but still present. Tonsillitis at 16 y.o.

**PSHx –** No previous surgery

**DHx -** Takes paracetamol when she gets occasional headaches but no regular medications.

**Penicillin** gives her a rash. **No other allergies.**

**FHx –** Nil significant

**SHx –** Eleanor is currently single and living in a shared flat with two of her friends. She works as a sales advisor for a financial technology company. She is a **non-smoker** and **drinks around 8 units a week**, a couple of glasses of wine a few times a week. She does not take any recreational drugs.

**Other information:**

- Other systems review – if enquires more about the headache this is occasional and there is no aura.

**Ideas:** She's not sure what has caused her irregular bleeding, although she thinks it could be related to her stopping the pill.

**Concerns:** She is very worried about the hair on her face and finds the bleeding really disruptive to her work. She's also getting more concerned about her weight.

**Expectations:** She is not sure what needs to be done but hoping the doctor will do some tests to find out what is causing this bleeding so that it can be stopped e.g. bloods tests or a scan. She's also hoping the doctor can change her acne medication to something stronger.

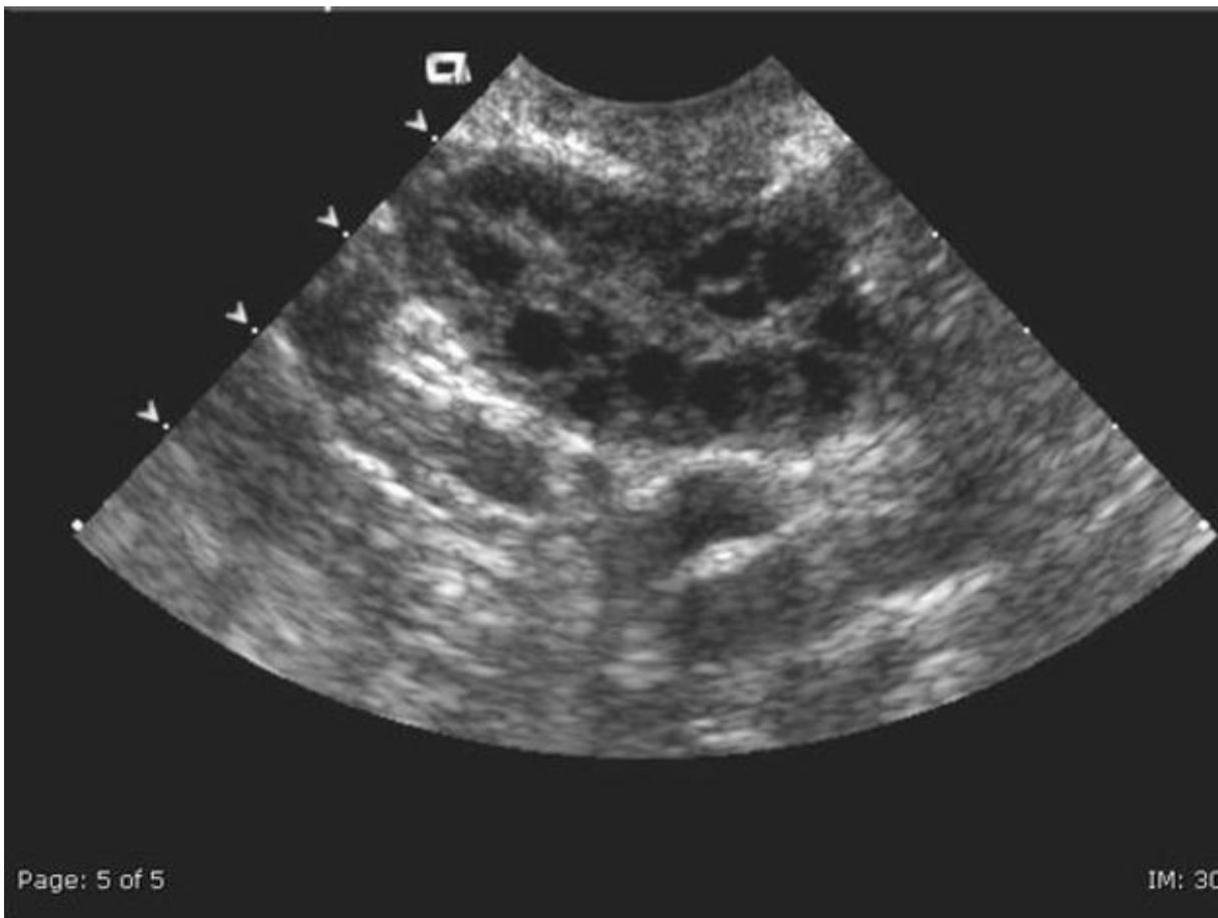


**Investigations findings** (Provide it after history talking or to enquire candidate about differential diagnosis)

**INVESTIGATIONS:**

BMI – 26 Kg/m<sup>2</sup>

Bimanual examination – NAD, Abdomen soft & non-tender



What does the above imaging suggest?

Polycystic ovaries

(Note at KCL images are generally normally used as part of an A-E assessment station or as part of a radiology presentation type station and not usually included in history stations)

[Radiopaedia, Polycystic Ovaries

<https://radiopaedia.org/cases/polycystic-ovaries?lang=gb#:~:text=The%20ovaries%20are%20polycystic%20and,so%20accumulate%20in%20number>]



## Examiner Brief

Candidate Brief: You are a 4<sup>th</sup> year medical student on your GP rotation. Please take a focused history from Miss Eleanor Tiles, a 23-year-old female who has presented with irregular bleeding.

8 mins	<ol style="list-style-type: none"> <li>1. Please take a full history (6 mins)</li> <li>2. At 6 minutes, present to the examiner and the examiner will ask you questions. (These usually consist of 1: what are your differential diagnoses? 2: What investigations and/or management plan/next steps would you like for this patient) (2 minutes)</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>

- **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: **(10 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>Bleeding:</b> Onset, Volume, Colour and Progression	2
Presence of <b>clots, dysuria, dyspareunia</b> or <b>discharge</b>	2
<b>Associated symptoms</b> including: hirsutism, acne, tiredness, and change in weight, bowel or symptoms related to menstruation	2
<b>Menstrual history</b> – age at time of menarche, LMP, regularity of periods and characteristics	2
<b>Gynaecological history</b> – <b>contraception</b> , menopause, STIs, cervical screening	2
<b>Obstetric history</b> – Gravity, Parity, outcome of pregnancies	1
Past medical (surgical) history; drug history, family history, social history	2
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
Summary and <b>interpretation</b> of clinical findings <b>accurately</b>	2
Discussion of management (4)	
Build patient concerns into plan and justify choice of investigations	2
Demonstrate MDT approach	1
Viva (Management)	1
Professionalism and patient centred 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
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**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.**

Resources: [BMJ Best Practice](#), [Polycystic Ovarian Syndrome](#).

1. Differential diagnosis	<p>Polycystic Ovarian Syndrome (PCOS)</p> <p>Endometriosis</p> <p>Cushing's syndrome</p> <p>COCP side effects</p>
2. What investigations would you like for this patient?	<p>- Bloods investigations: Fasting lipid panel, Fasting blood glucose, FSH and LH, Testosterone, Prolactin, TFTs, Dexamethasone suppression test</p> <p>- Transabdominal USS</p> <p>-</p>
3. How is PCOS diagnosed?	<p>Rotterdam (2003) Diagnostic criteria for PCOS – two out of three of:</p> <ul style="list-style-type: none"> <li>● Clinical hyperandrogenism (Ferriman-Gallwey Score &gt;8) or Biochemical Hyperandrogenism (Elevated Total/Free Testosterone)</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>● Oligomenorrhea (Less than 6-9 Menses per Year) or Oligo-Ovulation</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>● Polycystic Ovaries on Ultrasound (<math>\geq 12</math> Antral Follicles in One Ovary or Ovarian Volume <math>\geq 10\text{cm}^3</math>)</li> </ul>
4. What management would you like for this patient?	<p>The following management options would be suitable for this patient, including referral to outpatient Gynaecology clinic, if a Gynaecologist has not yet seen the patient.</p> <ul style="list-style-type: none"> <li>● Calculate BMI, if raised then advise weight loss.</li> <li>● Trial of re-starting COCP and start oral treatment for acne e.g. antibiotics.</li> <li>● Can also consider topical eflornithine cream for hirsutism and Drospirenone for antiandrogen effects, if required.</li> <li>● Consider addition of metformin if there is evidence of impaired glucose tolerance.</li> </ul>