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British Undergraduate Society of Obstetrics & Gynaecology
Inspiring the next generation of Obstetricians and Gynaecologists

Case: Freya Brown

Candidate brief

You are a GP in a surgery in York.

Please take a focused history from Freya Brown, a 25-year-old female who hasn't had her period in 9 months.

15 mins	1. Please take a full history (7 mins) 2. Counsel her with an appropriate management plan (4 mins) 3. Viva with the examiner afterwards (4 mins)
10 mins	1. Please take a full history (7 mins) 2. Viva with the examiner afterwards (3 mins)

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Patient Brief

(Do not volunteer information unless asked)

Name: Freya Brown
DOB: 27/08/1995 (25 years old)
Job: Primary School Teacher
Opening statement: "*I've come to visit my GP as I haven't had my period in over 9 months*"

HPC:

- Had regular 28-day cycle since menarche at age 14
- 18 months ago, periods became irregular, occurring 2-3 months
- Then stopped completely 9 months ago

Associated symptoms

- Headaches recently - unsure if related
- Visual disturbances occasionally
- Several episodes of milky discharge from breasts
- Loss of libido
- No weight loss

Obs Hx

- No pregnancies in the past

Gynae Hx
Period: Last menstrual period: 9 months ago

- Were irregular for 9 months before they completely stopped

Smears: NA
STIs: NA
Contraception: Uses condoms with regular sexual partner

PMHx – Lumbar sprain 12 months ago from RTA

DHx - NKDA, Takes opioids as analgesia for previous back injury

FHx –

- Mother (54) has hypertension
- Father (57) had BCC few years ago

SHx –

- Drinks 6 units a week
- Doesn't smoke
- No use of recreational drugs
- Likes to go to the gym a few times a week

Other information:

- Other systems review - normal

Ideas: Not really thought much of it as she believes she is fit and healthy, boyfriend wanted her to get checked up

Concerns: Worried she won't be able to get pregnant, as is getting married next year and wants to start a family

Expectations: To resume her normal menstrual cycles so she can then conceive

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

INVESTIGATIONS:

BMI – 21kg/m^2

Speculum Examination – unremarkable

Bimanual Examination - unremarkable

Abdominal examination – soft and non-tender

Prolactin	970	Reference range for females: 102 – 496 IU/L

MRI – shows space-occupying lesion in pituitary fossa in the region of the anterior pituitary

Examiner Brief

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10 mins	1. Please take a full history (7 mins) 2. Viva with the examiner afterwards (3 mins)

- **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
Amenorrhoea: Onset, Duration, Any exacerbating factors		2
Gynaecological symptoms: PV discharge, pain: pelvic, dysmenorrhoea, dyspareunia, chance could be pregnant		2
Cause of amenorrhoea: general (weight loss, stress, exercise, diet), head (visual problems, headaches), thyroid, torso (galactorrhoea, hirsutism, acne), abdomen (possibility of pregnancy)		2
Menstrual history – age at time of menarche, LMP, regularity of periods and characteristics		2
Gynaecological history – **contraception**, menopause, STIs, cervical screening		2
Obstetric history – Gravity, Parity, outcome of pregnancies		2
Enquire about **risk factors**: extreme anxiety/stress, poor diet, efforts to lose weight, low BMI, steroid use, certain contraceptives		2
Past medical (surgical) history; drug history, family history, social history		1
Formulation of clinical issue (5)		
Summary and **interpretation** of clinical findings **accurately**		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 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 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.**

Prolactinoma differential diagnosis – C. Michael Gibson, Anmol Pitiliya (https://www.wikidoc.org/index.php/Prolactinoma_differential_diagnosis)

Prolactinoma – NIDDK (https://www.niddk.nih.gov/health-information/endocrine-diseases/prolactinoma)

1. Differential diagnosis	Normal pregnancy, pituitary tumours other than prolactinoma, suprasellar tumours, hypothyroidism, chronic renal failure, liver disease (cirrhosis, viral hepatitis), seizure disorder, medication-induced (antipsychotic medications, antiemetic medications, antihypertensive medications)
2. What causes prolactinomas?	Most pituitary tumours develop on their own, and the cause is unknown. In some cases, genetic factors can play a role. E.g. multiple endocrine neoplasia type 1 increases the risk for prolactinomas.
3. What else can cause prolactin levels to rise?	They normally rise during pregnancy and breastfeeding. They can also rise slightly at other times, including: times of physical stress (i.e. painful blood draw), exercise, a meal, sexual intercourse, nipple stimulation, injury to the chest area, epileptic seizures. Other factors that lead to excess prolactin in the blood are medicines, illnesses and other pituitary tumours. Medicines include: antipsychotics, anti-hypertensives, anti-emetics, analgesics. Illnesses include: kidney disease, hypothyroidism, and shingles. Other large tumours located in or near the pituitary gland can also raise prolactin levels, usually by preventing from reaching the pituitary gland.
4. How would you manage a patient with a prolactinoma?	Diagnose with blood test for high prolactin levels, and then MRI or CT to confirm diagnosis and determine its size and location. Treatment is commonly medications – dopamine agonists (bromocriptine and cabergoline) to control prolactin levels and shrink the tumours effectively. Surgery includes transsphenoidal surgery or transcranial surgery to remove the tumour. If medicines and surgery fail to reduce prolactin levels, then radiation may be used.
5. What are the complications of hyperprolactinaemia due to a prolactinoma?	Can cause lower levels of sex hormones in both women and men. So related complications can include infertility or osteoporosis.
6. What are the complications of a macroprolactinoma?	Macroprolactinomas may press against nearby parts of the pituitary gland and the brain. So complications can include: vision problems (when the tumour presses on the optic nerves or optic chiasm), headaches, or low levels of other pituitary hormones, such as thyroid hormones and cortisol