



MSSBU OSCE PRACTICE

CASE 4_02_04

Station Vignette

You are a 3rd year medical student doing a placement at GCUH Emergency Department.

Cynthia Fletcher, 16-year-old female, has come in with lower abdominal pain.

TASK

You have a total of **7 minutes** to take a history.

This includes:

- History of presenting complaint
- Constitutional history
- Past medical history
- Medications history
- Social history
- Family history
- Focussed systems review

At the end of the allotted time, you will have **1 minute** to answer the examiner's questions.

You do **NOT** need to complete a physical examination.

PATIENT INSTRUCTIONS

Name	Cynthia Fletcher
DOB	09/11/2005 (16) years)
History	<ul style="list-style-type: none">- Presents with left lower abdominal pain since morning- Character – started as dull, now sharp & stabbing- Pain progressively became more severe from 6/10 to 8/10 and located in left (left iliac fossa).- Timing – started when biking this morning (8 am)- Exacerbating – movement & walking- Relieving – lying still- Associated sx – decreased appetite, nausea but no vomits, 2x episodes of diarrhoea, no blood in stool or mucous.- No sick contacts or recent travel, no trauma
Constitutional	<ul style="list-style-type: none">- Good energy levels until this morning- Nil weight loss- Slept well yesterday- Nil fevers, night sweats or bone pain, nil rash- No recent infection- Normal diet
OBGYN Hx	<ul style="list-style-type: none">- Last menstrual period – one week ago- Duration – 4 days- Regularity – Every 28 days- Pads used per day – 3- No abnormal bleeding – no intermenstrual spotting.- No discharge, no vaginal itching, no dryness- Pregnancy – never been- Sexually active – Never had sex
Systems review	<ul style="list-style-type: none">- Urinary problems – normal amount, no pain or burning whilst urinating, no blood when urinating- Bowel problems – no diarrhea or constipation, no blood in stool- Joint pain – no
Past medical hx	<ul style="list-style-type: none">- Asthma
Medications	<ul style="list-style-type: none">- Nil, nil allergies
Family Hx	<ul style="list-style-type: none">- Father has lung cancer and mother has Crohn's disease
Social hx	<ul style="list-style-type: none">- Non-smoker, drinks alcohol socially, nil IVDU- Nil recent travel, IUTD- Occupation – bar tender- Living – lives w/ boyfriend

EXAMINER QUESTIONS

1. Provide **two (2)** signs on physical examination that would prompt you to require immediate intervention.

2. List **one (1)** gynaecological and **one (1)** non-gynaecological differential diagnosis for this patient.

MARKING CRITERIA – Case 4_02_04

Item	Criteria	Mark
Introduction	<input type="checkbox"/> Hand hygiene <input type="checkbox"/> Appropriate introduction <input type="checkbox"/> Explains personal role and gains consent	/2
Presenting complaint	<input type="checkbox"/> Leads with open question <input type="checkbox"/> Follows with another open question	/2
History of presenting complaint	<input type="checkbox"/> Determine onset and progression <input type="checkbox"/> Ask about pain – SOCRATES <input type="checkbox"/> Screens for presence of vaginal lumps, pelvic pain, dyspareunia <input type="checkbox"/> Asks about exacerbating/relieving factors <input type="checkbox"/> Screens for any additional concerns/patient worry	/5
Constitutional history	<input type="checkbox"/> 0.5 points for each of the following: diet, appetite, weight loss, sleep, energy, exercise <input type="checkbox"/> 0.5 points for each of the following systemic symptoms: fevers, chills, night sweats, rash	/5
Past medical history	<input type="checkbox"/> Past medical/surgical history <input type="checkbox"/> Screen for relevant conditions/risk factors	/2
Medications history	<input type="checkbox"/> Ask over the counter, prescription & herbal remedies <input type="checkbox"/> Allergies	/2
Family history	<input type="checkbox"/> Ask relevant family history	/1
OBGYN Hx	<input type="checkbox"/> Gynaecological history – Contraception, STI, cervical screening <input type="checkbox"/> Obstetric history – gravity, parity, outcome of pregnancy <input type="checkbox"/> Sexual history – practices, no. of partners, etc.	/3
Systems Hx	<input type="checkbox"/> Rule out trauma and other initiating triggers <input type="checkbox"/> Urinary hx – rule out nephrolithiasis/pyelonephritis, gastro-intestinal hx (bowel habits – rule out IBD/IBS/colitis), MSK (swelling, bruising, tenderness)	/2
Social history	<input type="checkbox"/> Occupation, living situation, smoking, recreational drugs	/4
Questions	<input type="checkbox"/> Differentials – 2 points for any two ectopic pregnancy, endometriosis, ovarian rupture, torsion. Non-gyane – colitis, constipation, IBS, renal colic.	/2
Communication skills	<input type="checkbox"/> Appropriate questioning style <input type="checkbox"/> Active listening <input type="checkbox"/> Systematic approach to Hx taking <input type="checkbox"/> Appropriate conclusion and summary	/4
Global score	Overall impression of candidate based on warmth, clarity and competence: 1 = fail 2 = borderline 3 = pass/expected 4 = good 5 = excellent	/5
	Total	/39

Extra information – differential diagnosis for left iliac fossa pain.

Differential diagnosis	Typical presentation	Findings that support the diagnosis	Definitive diagnostic findings
Medical emergencies			
Ectopic Pregnancy	<ul style="list-style-type: none"> • Pelvic pain and/or bleeding in the first trimester (typically 6 to 8 weeks) • Pain may localize to one side 	<ul style="list-style-type: none"> • Positive pregnancy test 	Ectopic pregnancy identified on imaging and/or laparoscopy
Appendicitis	<ul style="list-style-type: none"> • Acute onset (hours to days) • Migration of pain from peri umbilicus to RIF • Systemic symptoms present: anorexia, nausea, vomiting 	<ul style="list-style-type: none"> • Migration of pain from umbilicus to right iliac fossa • Onset of pain not associated with menses • McBurney's point site of maximal tenderness 	Appendicitis confirmed on imaging, laparoscopic and/or histological findings
Ovarian cyst complications (rupture /torsion)	<ul style="list-style-type: none"> • Sudden onset of unilateral pelvic pain, more common in the right iliac fossa • May be associated with vaginal bleeding 	<ul style="list-style-type: none"> • Adnexal mass felt on bimanual examination 	Ruptured ovarian cyst identified on imaging and/or laparoscopy
Other causes			
PID¹	<p>Typical pain:</p> <ul style="list-style-type: none"> • Onset days to weeks and typically starts at the time of disruption of 	<ul style="list-style-type: none"> • Age 15 to 30 • Onset of pain typically occurs at the time of disruption of blood vessels² 	Endometritis / Salpingitis and/or tubo-ovarian abscess identified at laparoscopy and/or on histology

Other common causes of physiological or chronic pelvic pain that may be concurrent or need to be excluded			
Endometriosis	<ul style="list-style-type: none"> • Dysmenorrhoea • Pelvic pain similar in character and distribution to period pain but not confined to the first few days of menses • Deep dyspareunia • Bowel symptoms may be present • Typical chronic rather than an acute onset • Cyclical nature 	<ul style="list-style-type: none"> • Pain does not respond to PID antibiotic treatment 	Endometriosis identified by laparoscopic and/or histological findings
Mittelschmerz / Mid Cycle / Ovulation pain	<ul style="list-style-type: none"> • Typically mild unilateral iliac fossa pain last a few hours to a few days 	<ul style="list-style-type: none"> • Mid cycle of a regular menstrual cycle 	
Physiological period pain	<ul style="list-style-type: none"> • Typically bilateral pelvic pain, onset with menstruation • Pain may refer to lower back /upper thighs 	<ul style="list-style-type: none"> • Onset at the time of menstruation, last 1-2 days only 	

CLASSIFICATION OF THE PATHOLOGY OF THE LEFT ILIAC FOSSA

Gastrointestinal system

- Acute diverticulitis.
- Infectious colitis.
- Inflammatory bowel disease.
- Intestinal ischemia and ischemic colitis.
- Appendicitis
- Volvulus.
- Malignant neoplasm.
- Constipation / fecalomas
- Intestinal obstruction.
- Omental infarction
- Infarction / epiploic torsion (apendagitis).
- Foreign bodies

Genitourinary system

- Urinary tract infection.
- Ureteral stones
- Prostatitis

Gynecological system

- Ovarian cysts.
- Adnexal torsion
- Ectopic pregnancy.
- Pelvic inflammatory disease.

Others

- Psoas-iliac abscess
- Rectus sheath hematoma
- Retroperitoneal or abdominal hemorrhage.
- Retroperitoneal fibrosis.

References:

1. <https://epos.mysr.org/poster/esr/ecr2019/C-0261>
2. https://aci.health.nsw.gov.au/__data/assets/pdf_file/0004/319684/pid-differential-diagnoses.pdf