

The Dilemma of a Pelvic Mass

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Objectives



- Understanding the clinical presentation and diagnostic evaluation of pelvic mass
- How systematic approach can differentiate, identify and localize complex recurrent pelvic lesion
- How to manage by multidisciplinary collaboration
- To discuss the underlying pathology of recurrent pelvic lesion
- To Identify the risk factors of the patient

Particulars of patient

- Patient Name: Mrs. Morsheda Siddika
- Age: 31-year-old Female
- Religion : Muslim
- Address : Madhupur, Patuakhali
- Occupation: House wife
- Marital Status : Married
- Date of admission : 28-06-26



Chief Complaint

- History of laparotomy 14 months back due to chronic pelvic pain
- Persistence of pain for same duration
- Severe abdominal pain for last 5 days



History of present illness



- She was reasonably well 2 years back
- Since then, she had chronic lower abdominal pain
- Pain was
 - dull aching
 - In the lower abdomen
 - continuous
 - non-radiating in nature
 - which was aggravated on and off and
 - partially relieved by medications

History of present illness

.....cont

- At that time, she had no history of
 - dysmenorrhea or
 - Heavy menstrual bleeding or
 - foul-smelling vaginal discharge
- Bowel bladder habit was normal
- For these complain
 - USG of abdomen was done at local clinic on May, 2025, showing bilateral dermoid cysts
 - Then laparotomy was done at a Medical College hospital 14 months back

History of present illness

.....cont

- But no document was available, regarding
 - operation note
 - histopathology report or
 - discharge paper
- Following laparotomy patient's condition did not improve and her pain was deteriorating day by day



History of present illness

.....cont

- Then she was admitted to BMU under **Gynae oncology** department 1 month back
- Her condition was not improving
- Patient and her attendant decided to admit at free bed of Green life Medical college, under Obs and Gyna department



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History of present illness

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- During admission, the patient had **severe** abdominal pain and vomiting for 5 days
- The pain was
 - continuous
 - localized at lower abdomen
 - non radiating
 - no aggravating factor
 - partially relieved by NSAIDs
 - no association with menstrual cycle
 - pain was so **severe** that abdominal examination could not be elicited



History of present illness

.....cont

- Pain was associated with vomiting and
 - vomitus contained indigested food material
 - non projectile
 - 2-3 times / day
- bowel, bladder habits were normal
- Immediately after admission she was treated with
 - NPO + IV fluids for 72 hours
 - injectable broad spectrum triple antibiotic,
 - IV analgesics, antiemetics, anti-ulcerent



History of present illness

...cont

- When the acute condition subsided, she was thoroughly examined
- Differing pain and vomiting she did not have any
 - history of weight loss
 - Cough
 - hemoptysis
 - bone pain
 - abdominal distension
 - fever or
 - any foul-smelling vaginal discharge
- Normotensive, non-diabetic, non-asthmatic

Obstetric History:

- Married for 12 years
- Parity: Para 2 (Vaginal Deliveries)
- Age of last child: 3 years

Menstrual History:

- Age of menarche: 12 year
- Menstrual cycle: 28 days
- Menstrual flow: Average
- Dysmenorrhea: Absent
- Last Menstrual Period (LMP): 22/06/2026

Contraceptive history:

- Nil



- **History of past illness** : Nothing significant
- **Allergic history** : No allergy
- **Personal History** : Nothing significant
- **Immunization History** : Immunized according to EPI schedule and against COVID -19 vaccine
- **Drug History** : Could not mention names
- **Socioeconomic history** : lower Soccio economic condition

General Examination

- Appearance : **Ill looking and anxious**
- Body Build: Average
- Co-operation : Cooperative
- Decubitus : On choice
- Anemia: **Mild**
- Jaundice : Absent
- Cyanosis : Absent
- Dehydration: Absent
- Oedema : Absent
- Thyroid Gland : Not enlarged
- Lymph Node : Not palpable



General Examination

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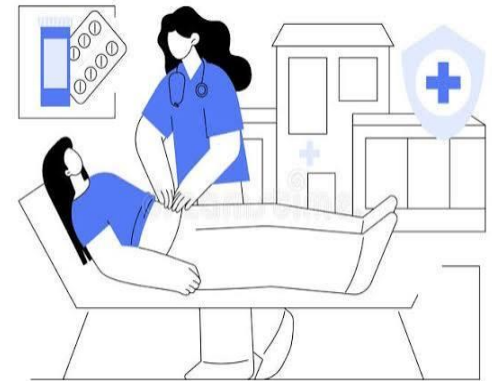
- **Vital Signs:**

- Blood Pressure (BP): 120/80 mmHg
- Pulse Rate: **92 beats/min**
- Respiratory Rate: 14 breaths/min
- Oxygen Saturation : 98%
- Temperature: **100[®] F**



Per abdominal Examination

- **Inspection :**
 - **Size and Shape: lower abdomen was bulged**
 - Umbilicus centrally placed and inverted
 - Flanks were not full
 - Skin condition Normal
 - **Transverse Scar mark in the lower abdomen** due to previous laparotomy



Per abdominal Examination

.....cont

- **Palpation :**

- Abdomen was soft but **tenderness** present
- A lump was -
 - ❖ felt in the hypogastric, right and left iliac and umbilical region
 - ❖ 16 × 14 cm size
 - ❖ **tender**
 - ❖ smooth surface
 - ❖ **partly solid and partly cystic** consistency
 - ❖ ill defined margin
 - ❖ mobility restricted
 - ❖ lower margin could not be reached



Per abdominal Examination

.....cont

- **On percussion :**
 - Tympanic outside the lump and
 - Dull over the lump
- **Auscultation :**
 - Bowel sound was present
 - No bruit felt over the lump



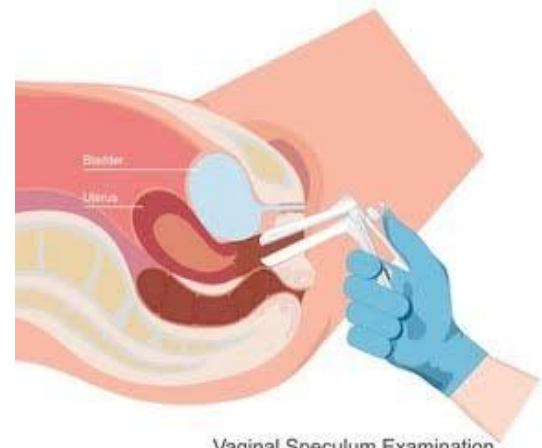
Per Vaginal Examination

- **Inspection :**

- Vulva looked healthy
- Hair distribution normal
- No discharge

- **Per speculum :**

- Cervix looked apparently healthy



Vaginal Speculum Examination

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Per Vaginal Examination cont



- **Bimanual Examination:**

- Uterus : size of the uterus could **not be delineated** due to large sized lump
- A lump was felt through anterior and Right fornix
 - ❖ about 16 weeks size
 - ❖ **tender**
 - ❖ partly solid and partly cystic in consistency
 - ❖ Ill defined margin
 - ❖ no groove could be identified between lump and uterus
 - ❖ cervix moves with Movement of the mass per abdominally

Per Vaginal Examination

.....cont

- Digital rectal examination :
 - Rectal mucosa was smooth
 - no nodule and induration was felt and
 - other findings corresponded with per vaginal examination

Systemic Examination

No Abnormality

Salient features

- Mrs. Morsheda Siddika, 31-year-old, Muslim, Married, House wife
- She was reasonably well 2 years back
- Since then, she had chronic lower abdominal pain
- **USG** showed **Dermoid cysts** & **at local medical college hospital a Laparotomy** was done 13 months back but no documents were available
- As, pain persisted even after operation, patient was referred to BMU after **13 months** of laparotomy

Salient features

....Cont

- At BMU she was evaluated for **1 month**
- Patient & her family decided to come at GLMC
- On admission, patient had **severe abdominal pain** and vomiting for 5 days
- After evaluation, she was treated as a case of acute abdomen
- 3 days after supportive treatment, her general condition improved

Salient features

....Cont

- On general examination, patient was ill looking, mildly anaemic & pulse and temperature was raised
- Per-abdominally – A tender, abdominopelvic lump was found, about 16×14 cm, **partly solid & partly cystic**, smooth surface, ill defined margin & **mobility was restricted**
- Per vaginal examination - similar findings with the abdominal examination & **Lump was continuous with the uterus**

Provisional diagnosis ?



Provisional diagnosis

**Abdominopelvic Mass most probably
Twisted ovarian tumor**

Differential diagnosis

- Tubo-ovarian mass due to PID
- Tubo-ovarian mass due to pelvic tuberculosis

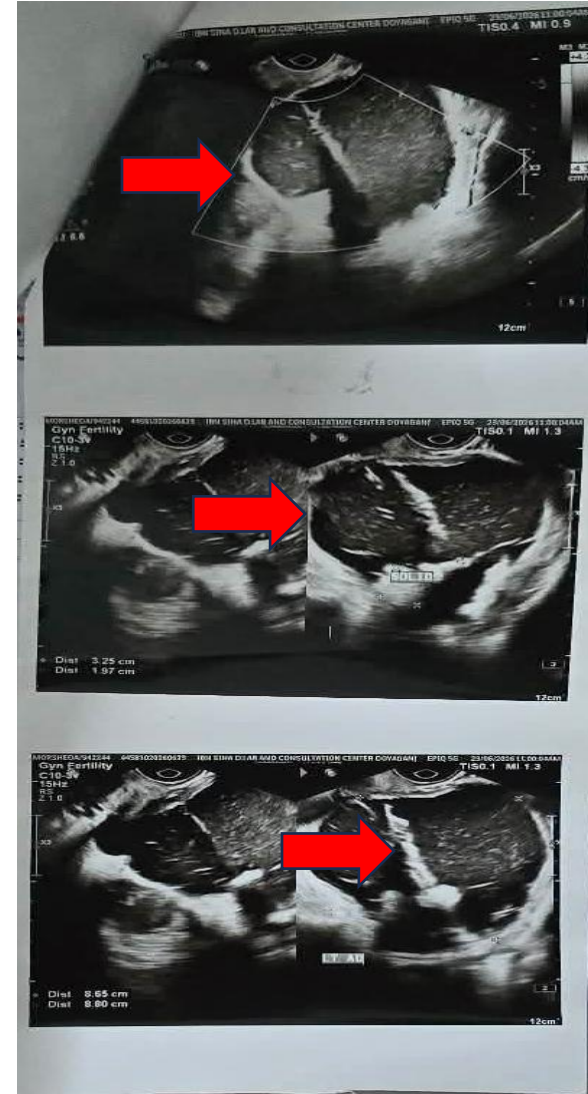


Investigations

Investigations

TVS WITH DOPPLER

- Right adnexal **solid mass** (6.0×5.5 cm). Peripheral vascularity was seen in doppler
- Left adnexal large **complex mass** (8.8×8.6 cm) with **low level echogenic** material having **thick septation** and small **solid** component (3.2×1.9 cm). Septal vascularity was present on doppler



Investigations

USG of WHOLE ABDOMEN WITH DOPPLER: (28.06.26)

- Bilateral ovarian complex masses- most likely **dermoid tumor**
- associated **endometriosis** in the right ovary
- suspected adhesion with adjacent structures
- **No** definite features of malignancy or torsion
- Elongated uniform uterus
- **No** pelvic collection
- Pelvic veins are **not** congested



Tumor Markers : (24.06.26)

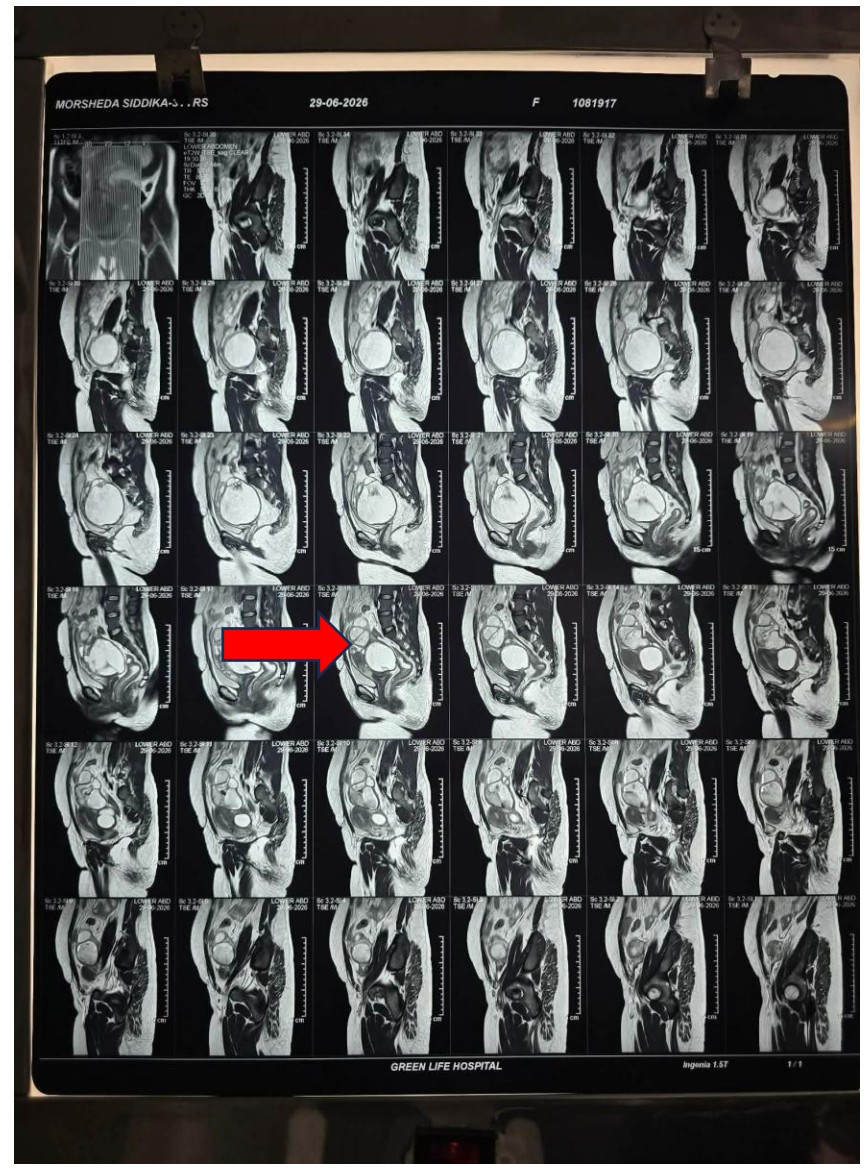


- CA 125 : 74.1 U/mL (Elevated)
- CA-19-9 : 542.4 U/mL (Elevated)
- CEA : 2.87 ng/mL
- LDH : 188 U/L
- AFP : <1.3 ng/ml
- S. Beta – hCG: < 2 IU/L

CONTRAST MRI OF LOWER ABDOMEN

(30.06.26)

- Thick-walled **complex cystic** lesion
- at bilateral adnexal regions
- having internal
 - fatty components
 - Septations
 - calcification
- adherent to adjacent
 - uterine surface
 - urinary bladder wall
 - serosal surface of adjacent pelvic bowel loops with inflammatory change
- mild free fluid collection at adjacent pelvic fat planes
- likely **infected dermoid cyst** or teratoma



Clinical Diagnosis

Abdominopelvic mass – most probably
infected ovarian dermoid cyst

Treatment plan

Laparotomy



Pre-operative investigations

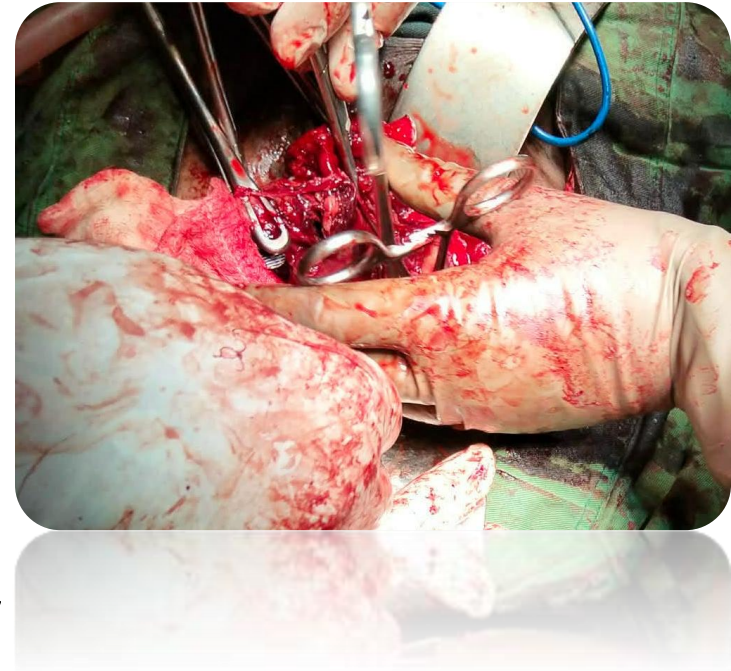
Name	Result		Date
CBC	Hb% - 11.5 g/dl ESR -21 mm 1 st hour Neutrophils- 80% Basophils – 00%	Monocytes- 04% Eosinophils – 03% Lymphocytes -33% Platelet – 341*10	30.06.26
TSH	1.68 µIU/ml		30.06.26
FT4	1.54 ng/dl		30.06.26
OGTT	Fasting Plasma Glucose: 5.7 mmol/L 2-Hour Post-75g Glucose : 9.6 mmol/L		30.06.26
S. Creatinine	1.07 mg/dl		30.06.26
HBsAg	Negative		30.06.26
Chest X-Ray	Normal		30.06.26
ECG	Normal		30.06.26
Urine R/M/E	Epithelial cell: 6-8 /HPF, Pus cell: 2-4 /HPF		30.06.26
Urine C/S	No growth		30.06.26

Operative Management

- **Date of Surgery:** July 1, 2026
- **Preoperative Diagnosis:** Abdominopelvic Mass most probably infected ovarian dermoid cyst
- **Name of Operation:** Exploratory Laparotomy

Intraoperative Findings

- During opening the peritoneal cavity huge adhesion was found
- Pelvic anatomy was completely **distorted**
- Uterus could **not** be identified separately
- Urinary bladder was densely **adherent** to the anterior uterine wall
- Small intestine was **adherent** to uterus and lump



Intraoperative Findings

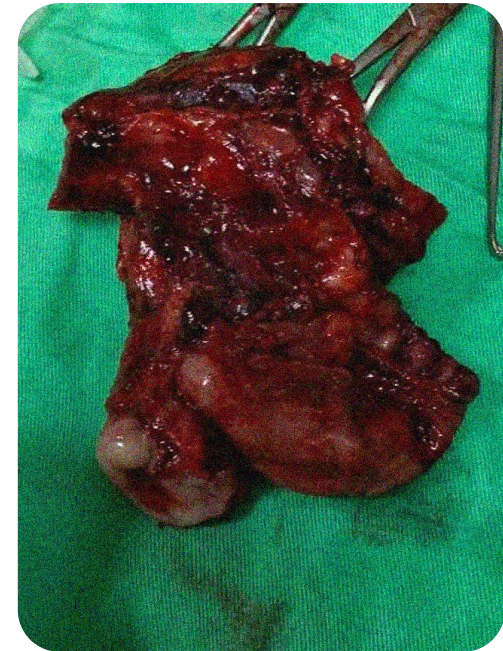
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- Both ovaries were **completely replaced** by infected, thick pus containing two lumps (measuring about 8×6 cm size each)
- One lump was tightly adherent to the **fundus of uterus & small intestine**
- Another lump was seated posteriorly occupying the **Pouch of Douglas** and adherent with the **posterior uterine wall & small intestine**
- After exploration we proceeded
- At first adhesiolysis was done
- During adhesiolysis cyst wall ruptured and huge, foul-smelling pus came out, measuring about 500 ml

Intraoperative Findings

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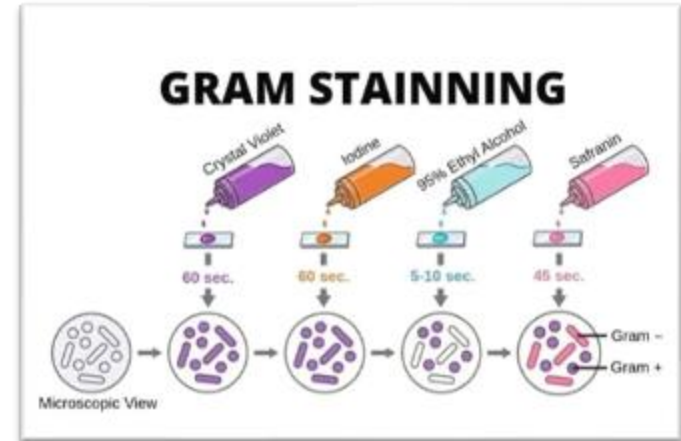
- Then hair and tooth material came out from the cyst
- Both large infected cysts were removed
- TAH, BLSO was possible to be performed successfully
- Proper hemostasis maintained
- Peritoneal toileting was done with normal saline
- Drain tube was kept in situ
- Specimen was sent for histopathology



Intraoperative Findings

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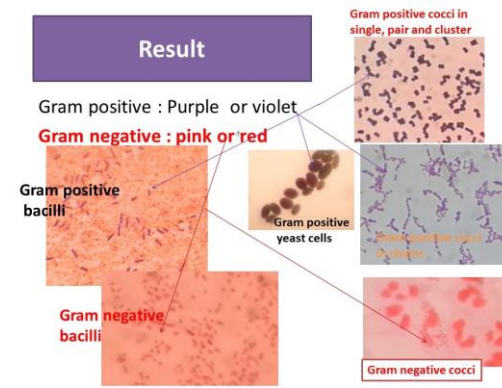
- Pus was sent for :
 - Gram stain
 - AFB stain
 - Culture & Sensitivity
 - RT-PCR



Post operative treatment

- NPO for 24 hours
- IV fluids
- Inj. **Meropenem**(1gm) ... I/V.... 8 hourly (continued for 7 days)
- Inj. **Amikacin**(500 mg) ...I/V 8 hourly (continued for 7 days)
- Inj. **Metronidazole**(500mg) ...I/V....8 hourly (injectable was given for 3 days then switched to oral formation)
- Inj. Esomeprazole (40 mg)
- Inj. Paracetamol (1gm)

Report of Pus (2.07.26)

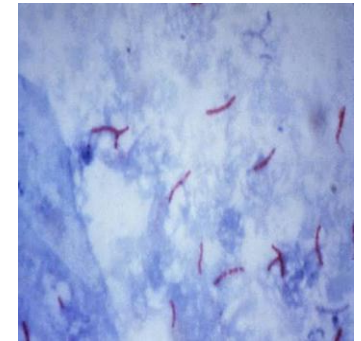


- **Gram staining:**

- Pus cells - plenty
- Gram-negative bacilli – scanty

- **Acid-Fast Bacilli (AFB) Stain:**

- **Positive** - short thick rods are seen – 0-2/ 100 oil immersion fields



- **Real-Time PCR:**

- *Mycobacterium tuberculosis* (MTB) DNA: **Not Detected**
- *Non-tuberculous Mycobacteria* (NTM) DNA: **Detected**

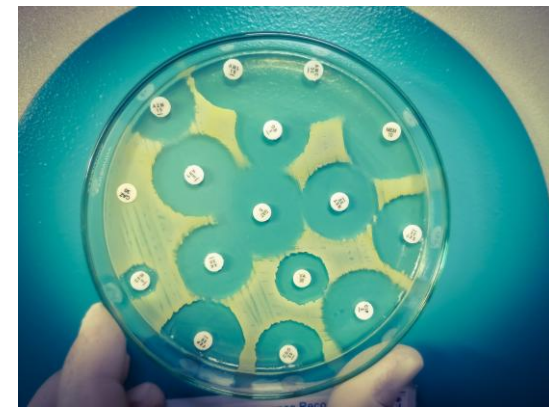


Multidisciplinary consultation

- After receiving RT-PCR report we consulted with **Medicine** and **Microbiology** Department
- Anti TB drug was **not recommended**
- The patient was advised to continue the ongoing antibiotics

Report of Pus

Pus Culture & Sensitivity test:



- Yielded : growth of ***Pseudomonas spp.***
- **Antibiotic Sensitivity Profile for Pseudomonas:**
 - **Sensitive:** Meropenem, Piperacillin, Amikacin, Gentamicin, Ciprofloxacin, Cotrimoxazole, Tigecycline, Colistin, Polymyxin-B.
 - **Resistant:** Imipenem, Cefepime, Ceftazidime, Cefixime, Amoxiclav

Pus Culture : Incubated aerobically at 37°C for 48/72 hrs has yielded growth.
Organism Isolated : *Pseudomonas spp.*
Colony Count :

ANTIBIOTIC	PATTERN		ANTIBIOTIC	PATTERN	
	A	B		A	B
Amoxiclav			Cefepime	R	
Ceftazidime			Meropenem	S	
Cefixime	R		Imipenem	R	
Ceftazidime	R		Piperacillin	S	
Cefuroxime			Tigecycline	S	
Aztreonam			Colistin	S	
Gentamicin	S		Fosfomycin		
Amikacin	S		Nitrofurantoin		
Cotrimoxazole	S		Polymyxin-B	S	
Ciprofloxacin	S				

S = Sensitive R = Resistant I = Intermediate

Histopathology Report (4.07.26)

- **Uterus:**

- Uterus was about 9×6×4 cm.
- myometrium was unremarkable
- Chronic cervicitis with squamous metaplasia

- **Ovarian Tissue:**

- Bilateral **Dermoid Cyst**
- Extensive secondary infection and acute-on-chronic inflammatory changes

- **Malignancy:** No evidence of malignancy

GLH - 60

1304-0

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Department of laboratory medicine

SURGICAL PATHOLOGY REPORT

No	H-1265/xxxxxx	Receiving Date:	01/07/26	Delivery Date:	04/07/26
Name	MORSHEDA SIDDIKA	Age:	31 Years	Sex:	Female
Refd. By	PROF. DR. LIMA SHOMPA, MBBS, FCPS (GYNAE & OBST.).				
Nature of Specimen	Uterus with cervix				

❖ With Compliments for kind referral.

GROSS DESCRIPTION:

Specimen received in formalin in a container with patient's identification and laboratory ID consisting of a resected uterus with one separated fallopian tube. The uterus measures 9 x 6 x 4 cm. The uterine cavity is unremarkable. Also seen in the same container are three collapsed cystic structures. The largest collapsed cystic structure measures 7 x 5 cm. The smallest one measures 5 x 3 cm. The cavity contains sebaceous material and hair structures. The cervix and fallopian tube are unremarkable.

Block summary: H-1265: Uterine wall: 02, Cervix: 02, H-1265/A: Fallopian tube: 01 and H-1265/B: Cystic structures: 05.

MICROSCOPIC APPEARANCE:

H-1265: Sections show cervix. It reveals features of chronic cervicitis with squamous metaplasia. Sections show uterine wall. It reveals endometrium in the late secretory phase. The underlying myometrium is unremarkable.

H-1265/A: Sections of fallopian tube do not show any significant change.

H-1265/B: Sections made from the grossly described cystic structures show an ovarian cyst wall. It is lined by stratified squamous epithelial cells with skin appendages. Focal areas show respiratory epithelium, glial and adipose tissue.

No evidence of malignancy is seen

Dx: 1. Uterus (resected): Chronic cervicitis with squamous metaplasia.
2. Ovarian cyst : Dermoid cyst

Confirmatory Diagnosis



Bilateral infected Ovarian Dermoid Cyst

Recovery

- Post- operative period was uneventful
- And then she was discharged on 8th POD



Diagnostic Dilemma



Complex pelvic masses with elevated CA-125 and CA 19-9 may indicate -

- Ovarian malignancy or
 - Benign diseases complicated by PID
-
- At this clinical case – we dealt a complex pelvic mass - mimicking **twisted ovarian tumor** or **malignancy**
-
- Ultimately diagnosed as - **bilateral infected ovarian dermoid cysts** with a **rare Non-tuberculous Mycobacteria (NTM)**

Raising trends of NTM / Atypical Microbacterium

- **Atypical Pelvic Infections:**

- Pelvic tuberculosis is common in developing nations
- But NTM must be considered when
 - **AFB stains - negative**
 - **RT-PCR for MTB - negative**
 - **RT-PCR for NTM - positive**

- **Targeted Therapeutic Strategy:**

- Standard anti-tubercular therapy (ATT) will fail in NTM cases
- Treatment requires macrolide-based regimens , e.g.
 - Clarithromycin or
 - Azithromycin with Ethambutol or
 - Rifampicin



Challenges during evaluation



- Less suspicion to reach diagnosis –
 - Ovarian dermoid is usually unilateral, **bilateral is rare**
 - Ovarian dermoid is **not** usually **get infected**
 - Atypical mycobacteria is **not contagious** like M. Tuberculosis, they are present in **tap water, soil, dust and aerosols**

Challenges during evaluation



- Lack of documentation –
 - No OT note of previous laparotomy
 - No histopathology report
 - No discharge paper
- Lack of good referral system –
 - It took **over 2 years** for our patient to receive proper treatment

Challenges overcome



- At our hospital we evaluated the patient **Thoroughly** with the help of multidisciplinary team
 - OBGYN
 - Surgery
 - Medicine
 - Radiology
 - Microbiology
- After proper investigations and evaluation, **definitive treatment** plan was made **per-operatively** after counselling with the patient's guardian
- Though her age is 31 years, Hysterectomy was done –
 - Otherwise, her chronic pelvic pain would not subside
 - Pelvic anatomy was completely distorted

Take Home Message



- Maintaining **documentation** ensures **continuity of care**
- **Multi disciplinary** approach helps to reduce errors, missed diagnosis and helps to provide appropriate management
- **Proper referral** can reduce delay in diagnosis & patient's sufferings

Where there is life
there is hope



Thank
you

