Welcome to Central Clinicopathological Seminar

A 26-Year-Old Lady with Upper Abdominal Pain

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Particulars of the patient

Name	: Mrs. X
Age	: 26 Year
Sex	: Female
Religion	: Islam
Marital Status	: Married
Occupation	: Housewife
Address	: Cumilla
Date of Admission	: 10/11/2024
Date of Examination	: 10/11/2024

Presenting complaints

- Upper abdominal pain for 1 month
- Feeling of lumpiness in the upper abdomen for same duration

History of present illness

According to the patient's statement, she was reasonably well 1 month back. Then she developed upper abdominal pain which was gradual in onset, dull aching in nature, non- radiating, no aggravating factor but relieved to some extent by taking medications, she could not mention the name. She also complained of feeling of lumpiness in the upper abdomen for same duration.

History of present illness (contd.)

For last one month, patient developed feeling of fullness & upper abdominal discomfort after having meal. She also complained of few episodes of vomiting which was spontaneous, non- projectile, bitter in taste, small in amount & vomitus contained recently ingested food materials.

History of present illness (contd.)

On query, her appetite was normal and she gave no history of weight loss, yellow discoloration of eyes or urine, cough, coughing out of blood, passage of blood mixed stool, no history of contact with tuberculosis patient or bone pain. She had no history of blood transfusion or any trauma to the abdomen.

History of present illness (contd.)

Her bowel & bladder habits are normal. She is diabetic but normotensive & non asthmatic.

With the above complaints, she was treated conservatively in local hospital for several times, but her symptoms did not subside. Then she was admitted in DMCH for further management.

History of past illness

- No significant past medical or surgical illness

Drug history

- Metformin Hydrochloride & Vildagliptin in combination & Gliclazide for 2 years

Personal history

- Non smoker, non alcoholic, did not consume betel nuts, betel leaves or tobacco

Dietary history

- Normal bengali diet

Family history

- All of her family members were alive & in good health

Menstrual and Obstetric history

- Menarche : 11 year
- Menstrual Cycle : Regular
- Duration : 4-5 days
- Flow : Average
- Para : 2 $_{(NVD)}$ + 0
- Age of last child : 2 years

Socio-economic history

- Belonged to lower middle socio-economic group

Allergy history

- Not allergic to any known food or drug

Immunization history

- Immunized as per EPI schedule and vaccinated against COVID-19

General examination

Appearance	: Normal
Body built	: Average
Co-operation	: Co-operative
Decubitus	: On choice
Nutritional status (BMI)	: 24.6 kg/m²

General examination (Contd.)

Anemia	: Absent
Jaundice	: Absent
Cyanosis	: Absent
Clubbing	: Absent
Koilonychia	: Absent
Leukonychia	: Absent
Dehydration	: Absent
Edema	: Absent

General examination (Contd.)

Pulse	: 86 beats/min
Blood pressure	: 120/70 mmHg
Temperature	: 99 °F
Respiratory rate	: 16 breaths/min

General examination (Contd.)

Accessible lymph nodes	: Not palpable
Thyroid gland	: Not enlarged
Neck veins	: Not engorged
Body tenderness	: Absent
Skin condition	: Normal

Abdominal examination

Inspection

Shape	: Normal
Umbilicus	: Centrally placed, vertical slit & inverted
Flanks	: Not full
Engorged vein	: Absent
Visible peristalsis	: Absent
Scar mark	: Absent
Hair distribution	: Normal
Hernial orifices	: Intact

Abdominal examination (Contd.)

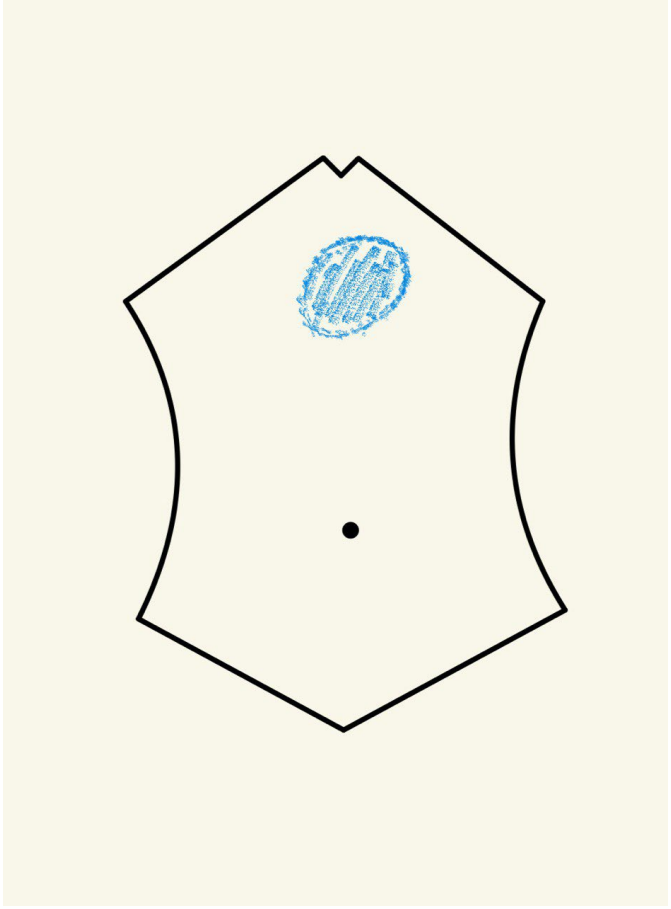
Palpation

Superficial palpation:

- No tenderness, no muscle guard or rigidity
- No palpable lump

Abdominal examination (Contd.)

- **Deep Palpation:**
- An intraperitoneal lump in upper abdomen involving epigastrium & left hypochondrium which was slightly tender, about 7x6 cm in size, surface is smooth, margin is ill defined, firm in consistency, moves with respiration & slightly side to side.
- Liver, Spleen & Kidneys were not palpable



Abdominal examination (Contd.)

Percussion

- Percussion note- dull over the lump, rest of the abdomen was tympanic
- Upper border of liver dullness - at right 5^{th} intercostal space along the mid-clavicular line
- Shifting dullness - absent

Auscultation

- Bowel sound- present & normal

Abdominal examination (Contd.)

Per- Rectal Examination

Inspection

- Normal

Digital Rectal Examination

- Anal tone & grip- normal
- Rectal mucosa- smooth
- No growth
- Examining finger- stained with stool on withdrawal

Respiratory System

Inspection

- Normal in shape with bilateral symmetrical chest movement

Palpation

- Trachea centrally placed
- Bilaterally symmetrical chest expansion
- Vocal fremitus was equal on both side

Respiratory System (Contd.)

Percussion

- Resonant on both side

Auscultation

- Vesicular breath sound, no added sound
- Vocal resonance was equal on both side

Cardiovascular System

- Pulse : 86b/min (regular)
- Blood pressure : 120/70 mmHg
- JVP : Not raised

Cardiovascular System

Examination of Precordium

Inspection

- No abnormality was detected

Palpation

- Apex beat in the left 5th ICS along the mid clavicular line
- There was no thrill, left parasternal heave, palpable P2

Auscultation

- Heart sounds were audible without any added sound

Nervous System

- **Higher Psychic Function** - Normal
- **Examination of the cranial nerves** – Normal
- **Motor System** –

  Muscle tone: Normal in both upper & lower limbs

  Muscle power: 5/5 in both upper & lower limbs

  Reflexes: Normal

  Co-ordination: Intact

Nervous System (Contd.)

- **Sensory System** – Normal
- **Cerebellar Signs** – Absent
- **Gait** – Normal

Salient Features

Mrs. X, a 26-year-old diabetic, normotensive, non asthmatic lady got admitted into DMCH on 10th November, 2024 with the complaints of upper abdominal pain for one month which was gradual on onset, dull aching in nature, non radiating, no specific aggravating factor but relieved to some extent by taking medications. She also complained of feeling of lumpiness in the upper abdomen for same duration.

Salient Features (Contd.)

For last one month, patient developed feeling of fullness & upper abdominal discomfort after having meal. She also complained of occasional vomiting which was spontaneous, non- projectile, bitter in taste, small in amount & vomitus contained recently ingested food materials.

Salient Features (Contd.)

There was no history of anorexia, weight loss, jaundice, cough, hemoptysis, hematemesis, melena or bone pain. Her bowel and bladder habits were normal.

On general examination- patient was co-operative, with average body built. She is neither anemic nor icteric. All other parameters were within normal limit except slightly raised temperature.

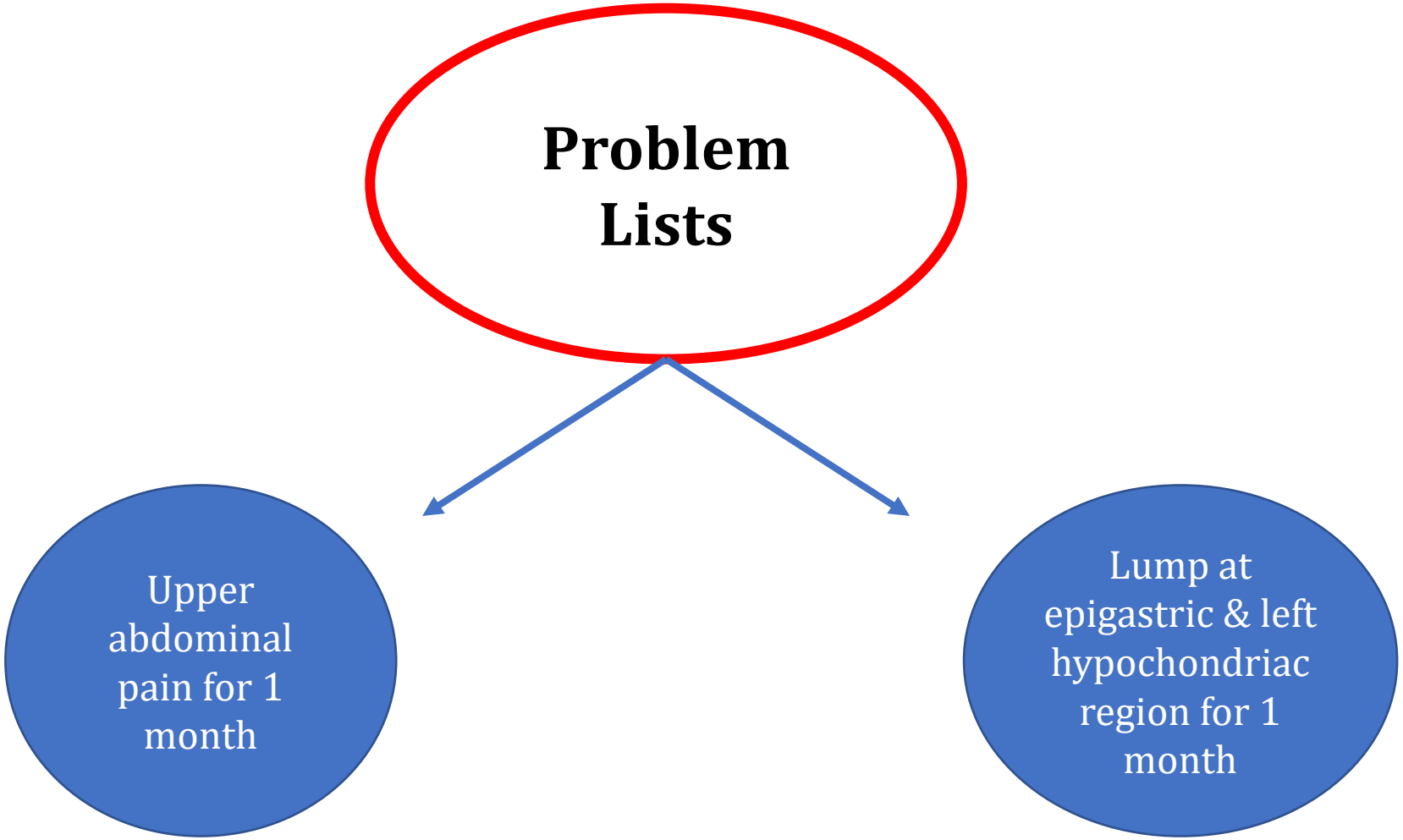
Salient Features (Contd.)

On abdominal examination- There was diffuse tenderness at upper abdomen & there was an intraperitoneal lump in the upper abdomen involving epigastric & left hypochondriac region which was about 7x6 cm in size, surface is smooth, margin is ill defined, firm in consistency, moves with respiration & slightly side to side & percussion note was dull over the lump.

Salient Features (Contd.)

No organomegaly was found. Per- rectal examination was normal. Other systemic examination findings were within normal limit.

A 26-year-old lady



Provisional Diagnosis

Provisional Diagnosis

Gastric GIST

Differential Diagnoses

- Gastric Lymphoma
- Cyst in the left lobe of Liver

Investigations

Upper GI Endoscopy (24/11/2024)

- Normal Upper G.I.T. at Endoscopy

USG of Whole Abdomen (Done before admission on 01/10/2024)

Findings:

- Cystic lesion about 9.5x8.5x8.5 cm in the left upper abdomen between the stomach and the spleen causing compression of the gastric fundus.

Impression:

1. Hepatomegaly (mild) with G-I hepatic steatosis
2. Splenic hydatid cyst

USG of Whole Abdomen (21/11/2024)

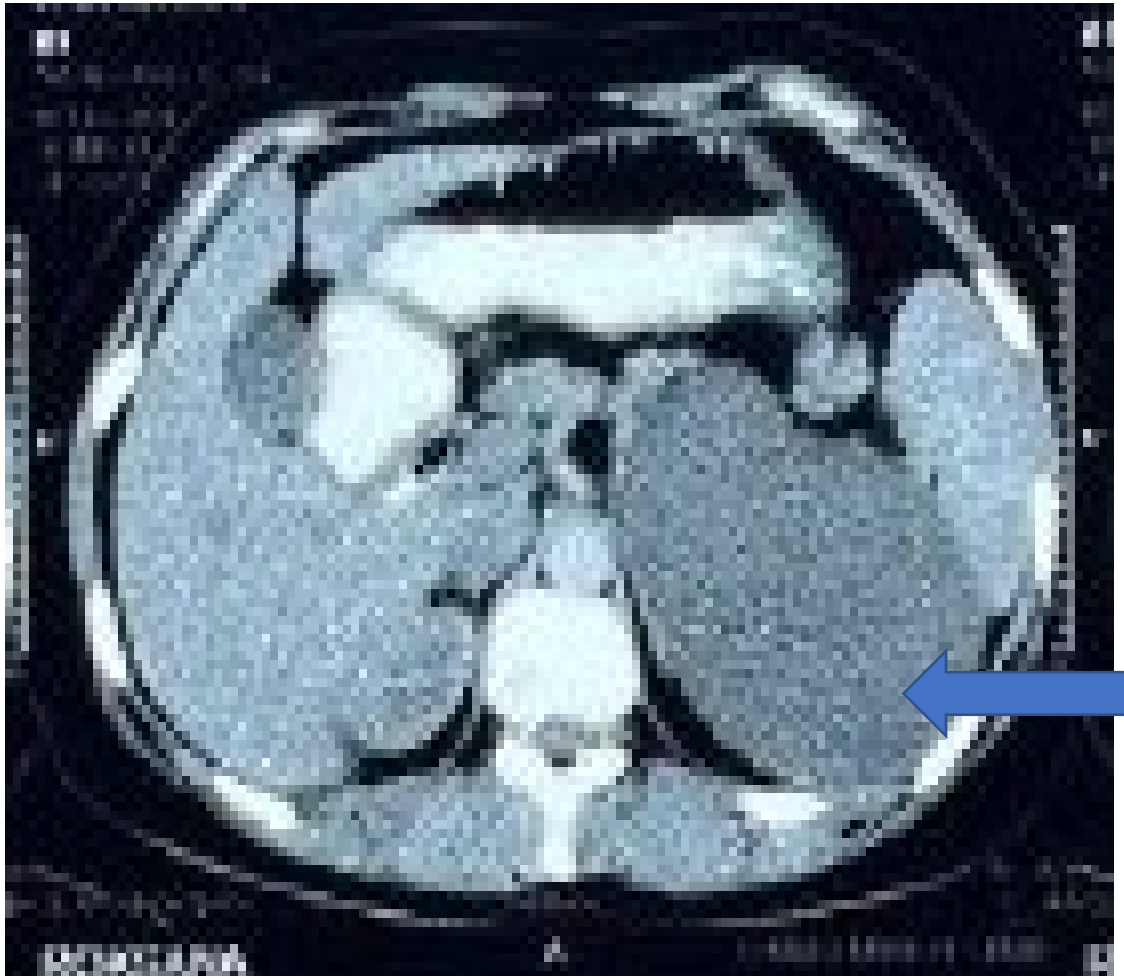
Findings:

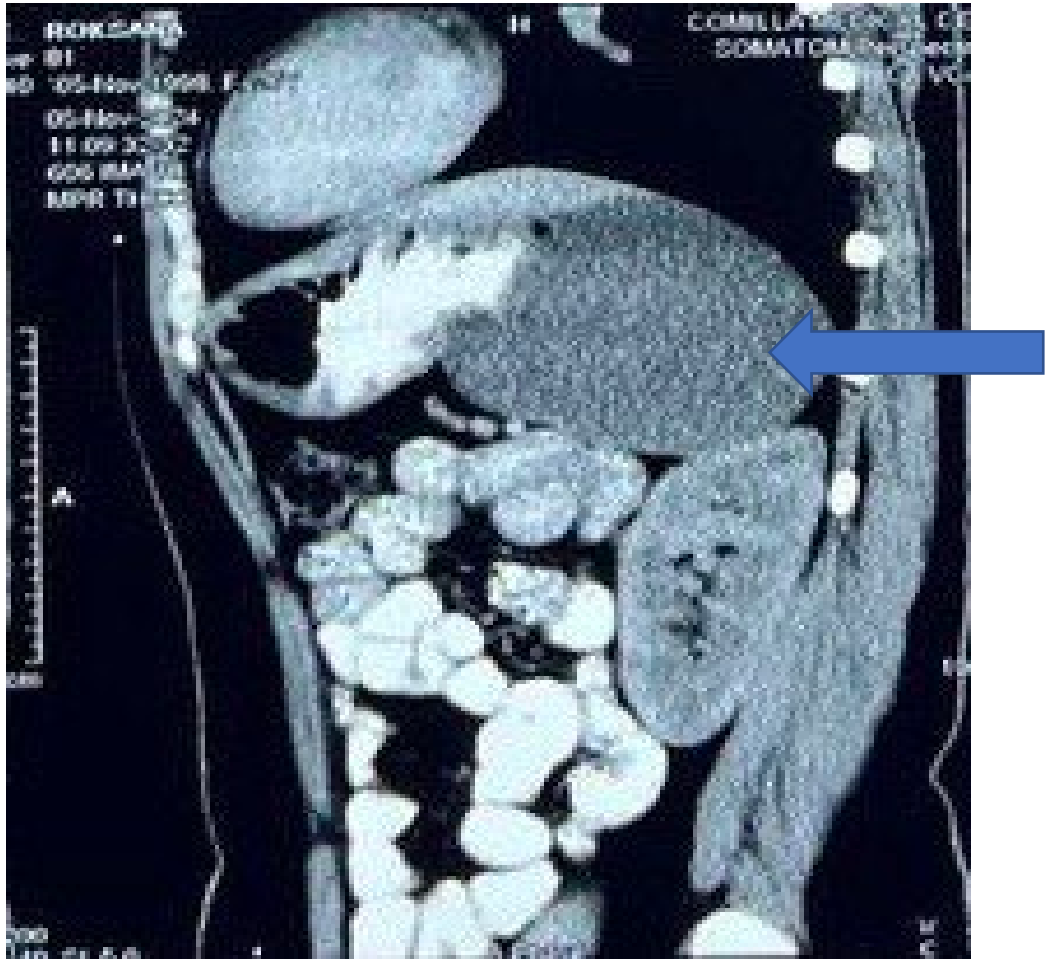
- Cystic lesion (about vol: 365ml) at left hypochondrium arising from upper pole of left kidney
- Low level internal echoes are noted without internal calcification/ septation

Impression:

- Left renal exophytic cortical cyst
- Mild hepatomegaly

CECT scan of Whole Abdomen (05/11/2024)





CECT scan of whole abdomen (05/11/2024)

Findings:

- Cystic lesion about 10.5x9.5x9.5cm in the left upper abdomen
- No IV contrast enhancement
- No solid component or calcification with thin septation

CECT scan of whole abdomen (05/11/2024)

Findings:

- Separated from the stomach, pancreas, spleen & kidneys but abutting the small bowel & adherent to left lobe of liver & left adrenal gland.

Impression:

Left upper abdominal cyst- most likely exophytic hepatic cyst.

DDx: Left adrenal exophytic cyst.

Other Investigations

Test	Result	Normal range
Echinococcus Ab	4.2	<9: Negative
S. LDH	217 IU/L	140-280 IU/L

Investigation Profile (Contd.)

Complete Blood Count

Hb %	: 11.5 g/dl
WBC	: 8,008/mm³
Neutrophils	: 88.4%
Lymphocytes	: 5.4%
TC of RBC	: 4.32 mil/mm³
Platelets	: 301 x 10³/mm³
ESR	: 20mm/hr

Investigation Profile (Contd.)

- Urine R/M/E : Normal
- RBS : 5 mmol/L
- HbA1c : 6.7%
- Serum Creatinine : 0.92 mg/dl
- ECG : Normal findings

Investigation Profile (Contd.)

CXR (P/A view):

- No abnormality detected

Investigation Profile (Contd.)

Biochemistry Report

- Serum Electrolytes : Na+ : 147 mmol/L

  K+ : 4.6 mmol /L

  Cl- : 103 mmol/L

- Serum Albumin : 4.64 gm/dl

Investigation Profile (Contd.)

- HBsAg : Negative
- Anti HCV : Negative
- Blood grouping & Rh typing : A (+ve)

Consultation from Department of Urology

- Cyst appears not to be adrenal origin

Clinical Diagnosis

Simple cyst in the left lobe of liver

Management Plan

- Counselling of the patient and family
- Vaccination
- Exploratory Laparotomy
- Follow up

Operation Note

- Date: 10.12.2024
- Time: 09:30 AM- 11:00 AM
- Venue: GOT-6
- Type of anesthesia:

  General anesthesia with endotracheal intubation

Per- operative Findings

- There was a subserosal cyst measuring about 9x7cm arising from the fundus & body of the stomach along the greater curvature
- Cyst contained creamy white thick fluid (approximately 300ml)
- Continuity of cyst with stomach was checked with normal saline & no continuity was found

Per- operative Findings (Contd.)

- No ascites, no liver metastasis, no pelvic or peritoneal seedling
- Liver, Spleen & Kidneys were normal

Operation Note (Contd.)

Procedure details:

- Content of cyst was aspirated
- Cyst wall was excised
- A 20Fr drain tube was kept at pelvis
- Abdomen was closed in layers
- Excised cyst wall sent for histopathology.
- Content of the cyst was sent for culture- sensitivity, cytology & malignant cell

Histopathology Report

- **Specimen:**

  Excised wall of subserosal gastric cyst

- **Microscopic Description:**

  Section show cyst wall lined by atteneuted epithelium. Supporting fibrocollagenous tissue is infiltrated with chronic inflammatory cells & dilated congested blood vessels.

No gastric mucosa is seen in the section examined.

No malignancy is seen.

- **Diagnosis:**

  Compatible with cyst wall

Fluid from cyst for culture & sensitivity

- Revealed no growth

Fluid from cyst for cytology & malignant cell

- **Total Cell Count (WBC) –**

  10,000 cells/cu mm
- **Neutrophils** – 10%
- **Lymphocytes** – 90%
- **RBC** – Nil
- **No malignant cell is seen**

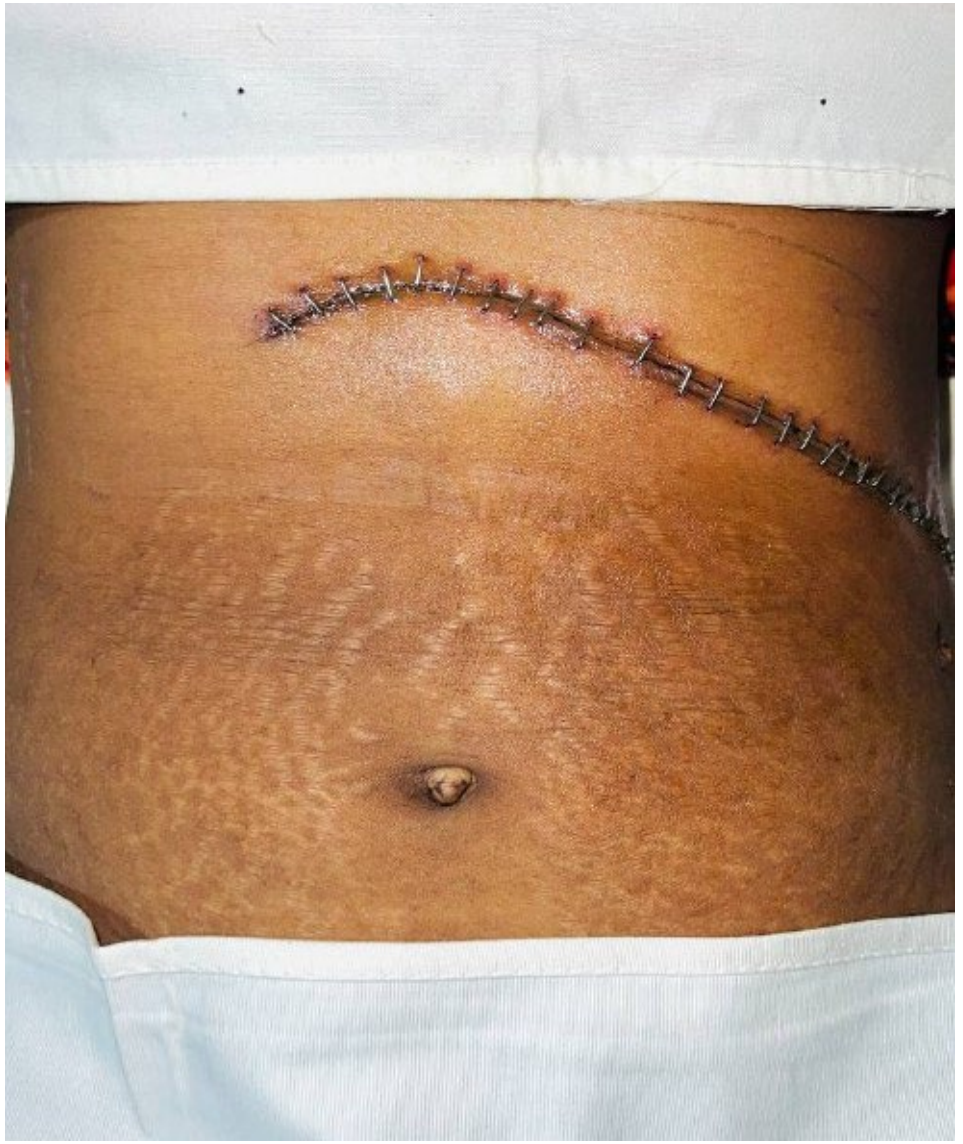
Confirmatory Diagnosis

Cyst arising from stomach wall

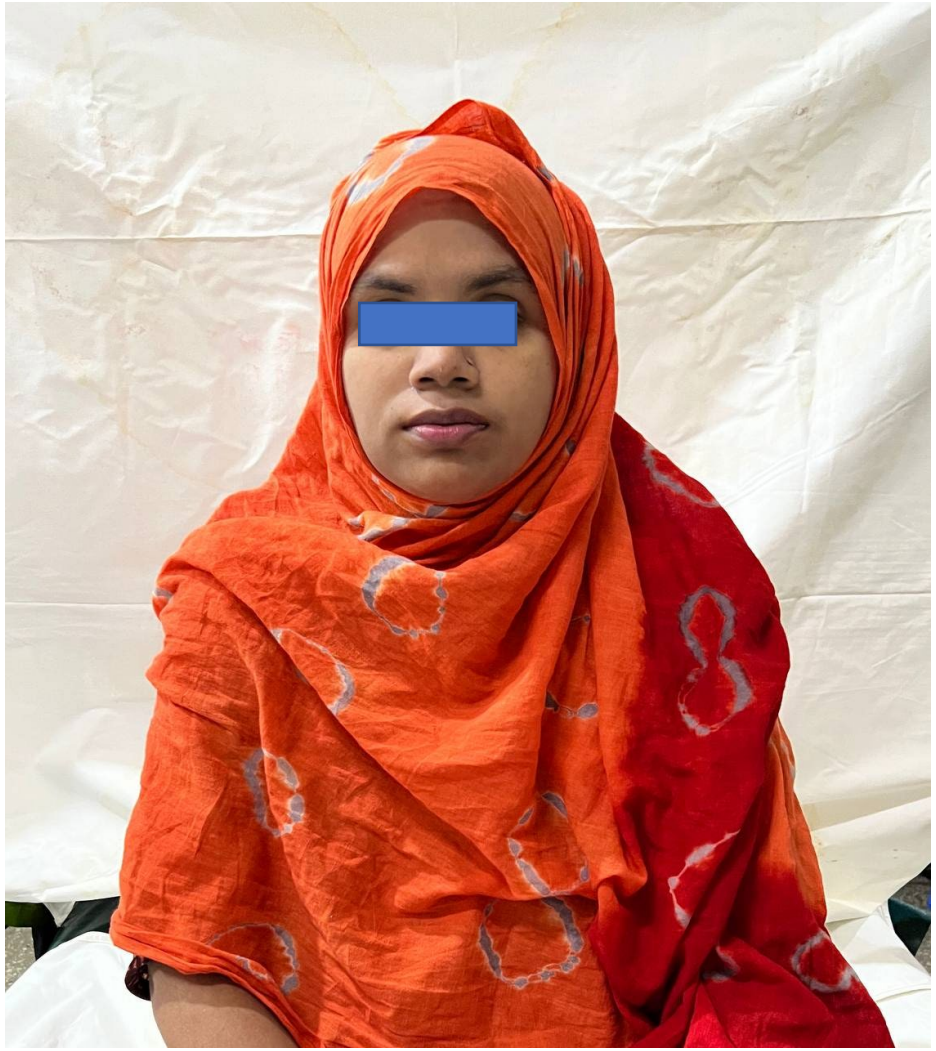
Post Operative Follow Up

- Post operative recovery was uneventful
- Patient was safely discharged to home at 10^{th} POD with proper advice and follow up schedule
- Patient came for follow- up after 1 month. Now she is well without any complications.

Post- operative Picture



Our Patient During Discharge



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Letter to Editor

Rare adult gastric duplication cysts with an isolated large gastric cyst: A case report

Keywords:
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Surgery

To the Editor,

Gastric duplication cysts (GDCs) are a rare congenital anomaly. It is a rare anomaly in adults, the majority of cases are diagnosed in those under 12 years of age. The preoperative diagnosis of gastric duplication cysts is difficult, and the definitive diagnosis depends on postoperative pathology. GDCs are a rare congenital disease, accounting for approximately 4 % of all gastrointestinal tract duplications.[1] Here,we present an extremely rare case of adult GDC with gastric cyst that was successfully treated at our center.

A 21-year-old male was referred to our hospital for an abdominal computed tomography (CT) examination that revealed the presence of a cystic mass in the stomach. Upon subsequent enhanced CT and magnetic resonance imaging (MRI) evaluation, it was determined that the stomach contained cystic lesions with calcification, in combination with cystic lesions in the splenogastric space(Fig. 1ab). Despite the presence of these lesions, the patient displayed no typical clinical symptoms, such as abdominal pain or nausea. Routine coagulation parameters and tumor biomarkers, including carcinoembryonic antigen (CEA) and carbohydrate antigen 19-9 (CA19-9), were within the normal range. The patient subsequently underwent partial gastrectomy. During the surgical procedure, two cystic masses were identified, one located on the anterior wall of the gastric antrum and the other on the greater curvature of the gastric fundus. These masses measured 4.0 cm*6.0 cm and 8.0 cm *9.0 cm in size, respectively, and were found to be shifted relative to the serosa layer and normal gastric tissue, with no communication with the gastric cavity(Fig. 1cd). Postoperative pathological examination revealed that the small cystic lesion was characterized by GDC and the large cystic lesion was a gastric cyst(Fig. 1ef). No recurrence was observed during the standard two-year follow-up period.

GDCs are a rare condition in adults, accounting for only 4–8% of all gastrointestinal duplications.[2] The cause of their formation is not yet clear, and various etiological theories have been proposed.[3] GDCs are classified as cystic or tubular depending on their communication and contiguity with the stomach. Preoperative diagnosis of GDCs is difficult, and the final diagnosis depends on postoperative pathology. Their common pathological features are as follows: (1)a smooth muscle layer in the wall of the abnormal sac, (2) the inner surface of the sac wall is covered with gastrointestinal mucosa, and (3) most anomalies are closely attached to the gastrointestinal wall, sharing the same wall and blood supply as the normal gastrointestinal tract.[4] This disease has no specific clinical symptoms. Depending on the size and location of the lesion, different clinical symptoms may occur, such as abdominal pain, distention, vomiting, weight loss, palpable masses, intestinal obstruction,and gastrointestinal bleeding, among others.[4, 5] Preoperative diagnosis of the disease relies on imaging techniques such as endoscopic ultrasound, CT, and MRI scans, but most cannot be diagnosed preoperatively. A definitive diagnosis can be made by combining intraoperative findings with postoperative pathology.In summary, GDC in adult patients with gastric cyst is an extremely rare condition that is usually misdiagnosed preoperatively. Due to the risk of malignancy, GDC should be treated surgically with complete excision.

Conflicts of interest statement

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.


thank you