

Abdomen- Still An Enigma

**Presented by
Department of Surgery
Green Life Medical College**

The Patient

- Name: Fazlur Rahman
- Age: 58 years
- Sex: Male
- Religion: Islam
- Marital Status: Married
- Occupation: Businessman
- Address: Bogura, Matitali Sadar
- Date of Admission : 22/7/23
- Ward: Male Surgery ward,1308

Chief Complaints

- i) Discharge from multiple openings overlying previous scars in rt. lower abdomen and right thigh for 1.5 months
- ii) Lump in the right lower abdomen for 10 months



History of present illness

- Multiple discharging openings over the scar marks of previous surgery in the right lower abdomen and lateral aspect of right upper thigh
- Discharge was spontaneous and faeculent in character and odour

History of present illness

- Right lower abdominal lump:
 - 10 months
 - initially painful , later painless
 - no remarkable change in size
- No history of evening rise of temperature, loss of appetite or significant weight loss.
- No history of change in bowel habit or passage of blood with faeces.

History of past illness

- He was admitted under dept. of orthopaedics of GLMC on 30/12/22 with a right lower abdominal lump extending to the right gluteal region and upper thigh which was diagnosed as right sided gluteal abscess.
- Incision and drainage was done
- No evidence of TB was detected

History of past illness

- Broad spectrum I\V antibiotics were given.
- Wound was managed with regular dressing followed by secondary closure.
- Colonoscopy- Caecal diverticulitis
- OBT- Positive
- Post operative period was uneventful and patient was discharged.

History (contd.)

- **Personal History:** He was occasional betel nut chewer, non-smoker and non alcoholic
- **Family History:** All his family members were in good health.
- **Socio economic history:** lower middle class
- **Drug History:** Inj. Insulin for DM for 6 months
- **Immunization history :** Immunized against COVID-19
- **Allergy History:** Not allergic to any known food or medication

GENERAL EXAMINATION

- Appearance - looking ill
- Body Built – average
- Co-operation- Co operative
- Anemia – **mildly anaemic**
- Jaundice – absent
- Cyanosis – absent
- Clubbing – absent
- Koilonychia – absent
- Leukonychia - absent
- Edema – absent
- Dehydration – present
- Pulse - 80 bpm
- Blood pressure- 120/80mmhg
- Respiratory rate - 16b/min
- Temperature – normal
- Accessible Lymph Nodes: not palpable
- Thyroid gland: not enlarged

Examination of the Abdomen

Inspection

- Multiple discharging openings with pinkish granulation tissue:
 - single opening present over the scar mark of right iliac fossa just anterior to the right iliac crest.
 - two openings were present over the scar mark of lateral aspect of right upper thigh.



Examination of the Abdomen

Shape of the abdomen : normal

Umbilicus: centrally placed and inverted

Flanks: not full

Pigmentation, visible peristalsis: absent

Examination of the abdomen: Palpation

Superficial palpation:

- No tenderness, muscle guard and rigidity
- No palpable lump

Examination of the Abdomen: Palpation

Deep Palpation:

An intra-abdominal lump was palpable in the right iliac fossa.

- Non tender
- Overlying temp.- not raised
- Size- app. 8 x 6 cm
- Shape - Irregular
- Overlying skin- normal
- Consistency- firm
- Mobility- partially mobile in all directions

Examination of the abdomen

Percussion:

- **Percussion note** : tympanitic
- **Shifting Dullness:** absent

Auscultation:

- **Bowel Sound:** audible

Systemic Examination

Respiratory System: Revealed normal findings

Cardiovascular System: Revealed normal findings

Nervous System: Revealed normal findings

Salient features

Mr. Fazlur Rahman, a 58-year-old Muslim male, hailing from Bogura, was admitted to GLMC on 22/7/23 with the complaints of foul smelling faeculant discharge from multiple openings overlying previous scars in right lower abdomen and right thigh for 1.5 months and a lump in the right lower abdomen for 10 months.

- He had no history of fever, loss of appetite or significant weight loss; no altered bowel habit.
- He was previously admitted under orthopaedics department and underwent incision and drainage for right sided gluteal abscess.
- His colonoscopic findings revealed caecal diverticulitis and his OBT was positive.
- Post operative period was uneventful and he was discharged after secondary closure of the healing wound.

He is normotensive, diabetic and non asthmatic.

- His bowel and bladder habit were normal.

- On examination of the abdomen, inspection revealed

 - multiple discharging openings :

 - single opening present over the scar mark of right iliac fossa just anterior to the right iliac crest.

Salient Features

-two openings present over the scar mark of lateral aspect of right upper thigh.

There was a palpable, non-tender intraabdominal lump in the right illiac fossa, 8x6cm in size, ill defined, irregular in shape, firm in consistency and partially mobile.

Percussion note over the abdomen was tympanitic and auscultation revealed audible bowel sound.

All other systemic examinations revealed no abnormal findings.

Provisional Diagnosis



Differential Diagnoses

Enterocutaneous fistula with DM due to:

Ileocaecal TB

Carcinoma colon

Inflammatory Bowel Disease

INVESTIGATIONS

Colonoscopy (30/7/23)

- Multiple pseudopolyps seen
- Narrowing of I/C valve, scope could not be entered into ileum. Biopsy taken.
- Caecal wall shows multiple diverticulosis.
- Findings consistent with Crohn's disease involving terminal ileum with stricture formation.

Colonoscopy



Caecum



I/C valve

Colonoscopy (30/7/23)

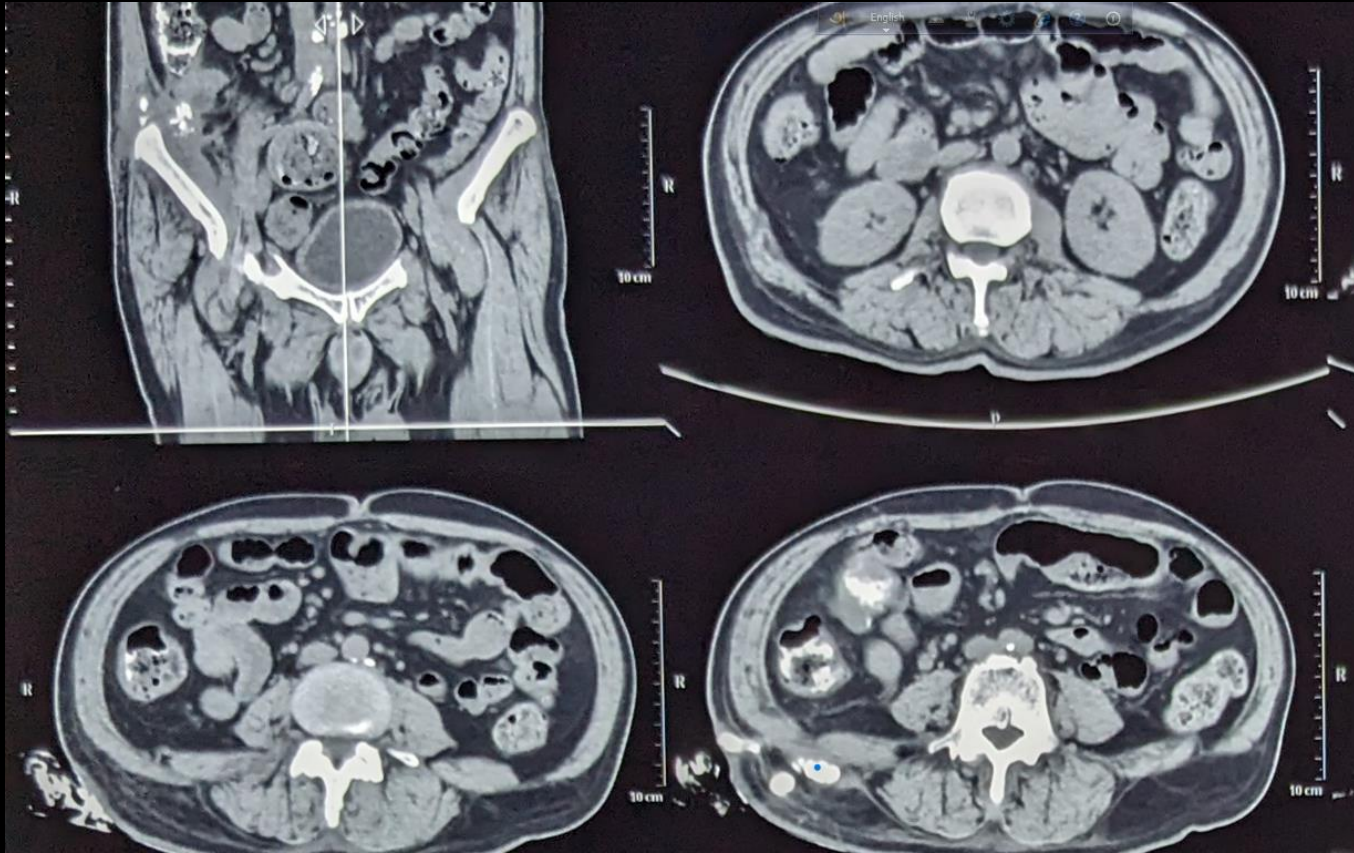
- Biopsy Report: Lamina propria infiltrated with chronic inflammatory cells, focal areas of goblet cell metaplasia. No granuloma or malignancy seen.
- Dx: Chronic ileocolitis with ulceration

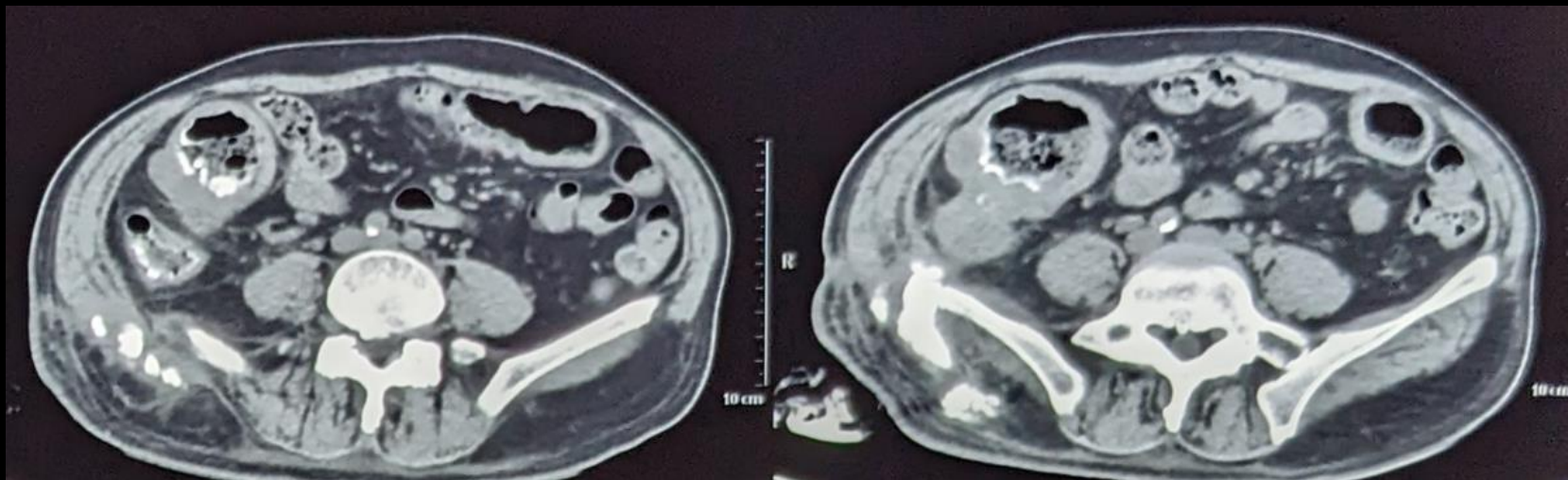


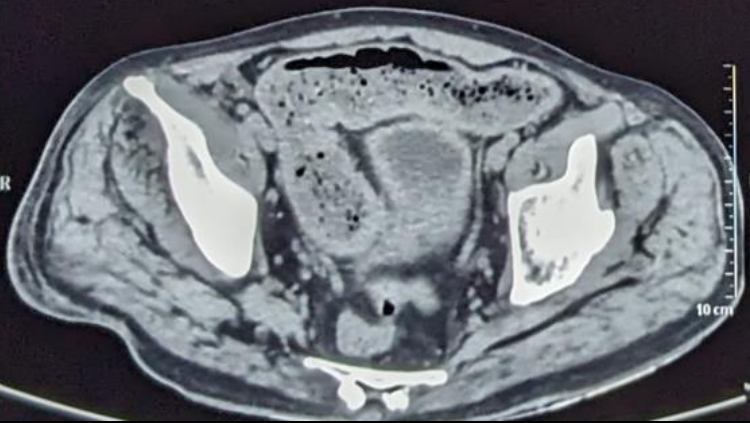
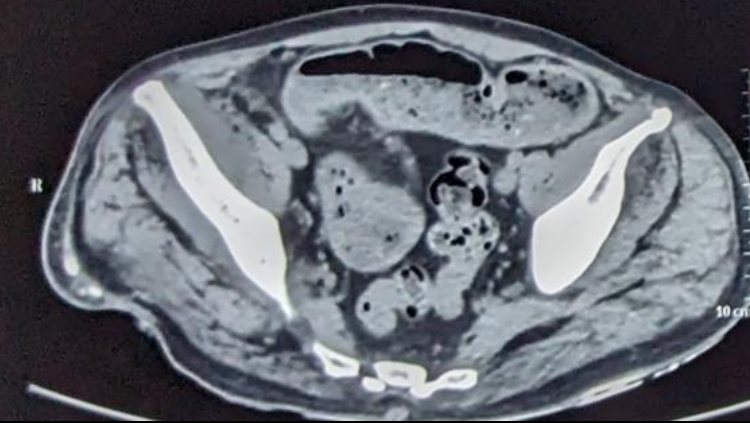
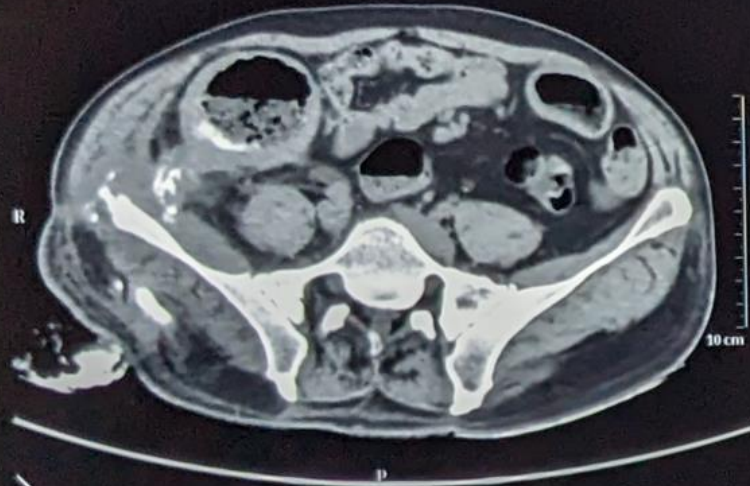
Other Investigations

- Faecal calprotectin: 1442.2 ng/g
Normal level : 50-60 ng/g

CT Sinogram







CT Sinogram

- Multiple external openings at right lower postero-lateral abdominal wall and gluteal region.
- Marked thickening of wall at terminal ileum, ileo-caecal junction, caecum and adjacent part of ascending colon.
- Internal opening at anterior wall of terminal ileum.

CT Sinogram

- Multifocal small abscesses within musculo aponeurotic layer and complex enterocutaneous fistula at right lower postero-lateral abdominal wall including right iliac fossa.
- Diffuse inflammatory change at fat planes of right lower postero lateral abdominal wall.
- Regional,mesenteric and right inguinal lymphadenopathy.

Investigations

Pus from the discharging sinus sent for -

- **C/S** - organism isolated E.coli

Sensitive to -

Meropenem, Imipenem, Piperacilin/Tazobactam, Ceftazidime
, Tigecycline and Cefipime

- **Z-N staining**- AFB not found

Plan of Treatment

Exploratory laparotomy followed by right hemicolectomy and defunctioning ileostomy and excision of sinus tracts

INVESTIGATIONS
for
GENERAL ANAESTHESIA FITNESS

GA fitness investigations

- CBC

Hb- 10.6 g/dl

- Urine RME

No abnormality found

- S. Electrolyte

Potassium- 3.0mmol/L

- S. Albumin- 23gm/l

- X-ray chest- Normal

- Anti HCV- Negative

- HbsAg-Negative

- ECG- Normal

- S. Creatinine- 1.1gm/l

- Blood Group- 'A' positive

Pre-operative Treatment

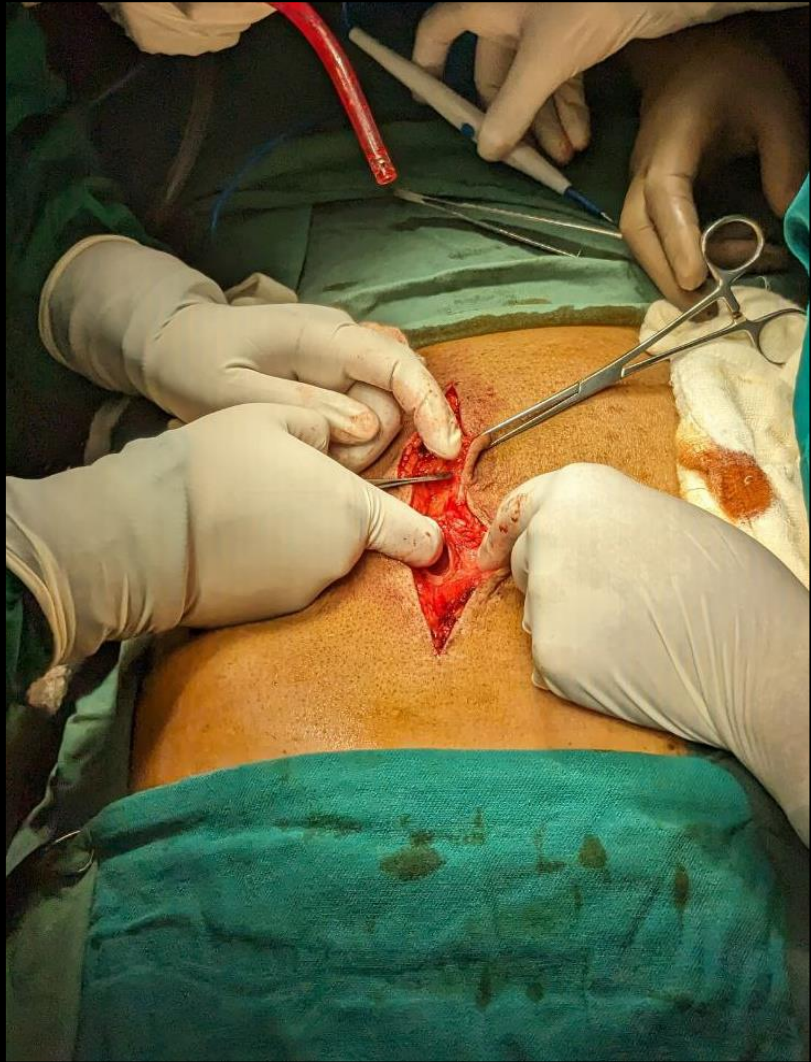
- Crohn's disease: Tab. Azathioprine (50mg) 1+0+1
- for at least 7 days before any surgical intervention
- Inj. Meropenem: acc. to C/S report
- High protein diet: to correct hypoalbuminemia
- Inj. Potassium: to correct hypokalemia

Operation Note

- Date : 23/8/23
- Time : 9:30 am- 1:00pm
- Name : Fazlur Rahman
- Age : 58 years
- Anaesthesia : General
- Incision : Midline
- Name of Surgeon: Prof. ABM Bayezid Hossain
- Name of anaesthetist: Prof. Rabeya Begum

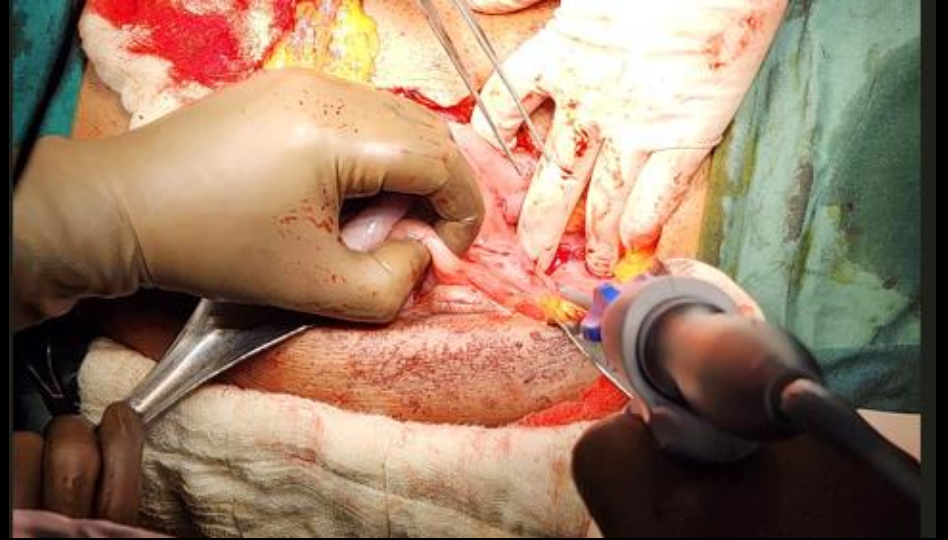
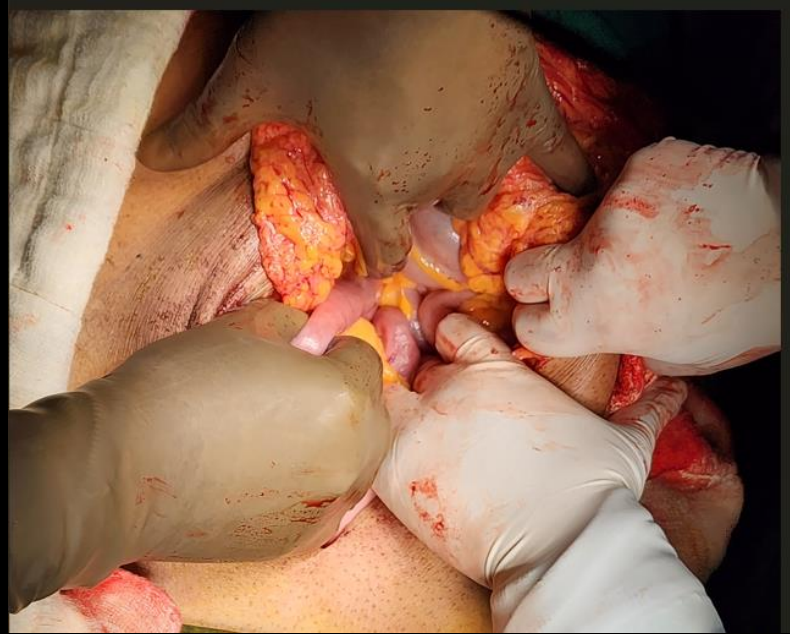
Name of the operation :

Exploratory laparotomy followed by right hemicolectomy and defunctioning ileostomy and excision of sinus tracts

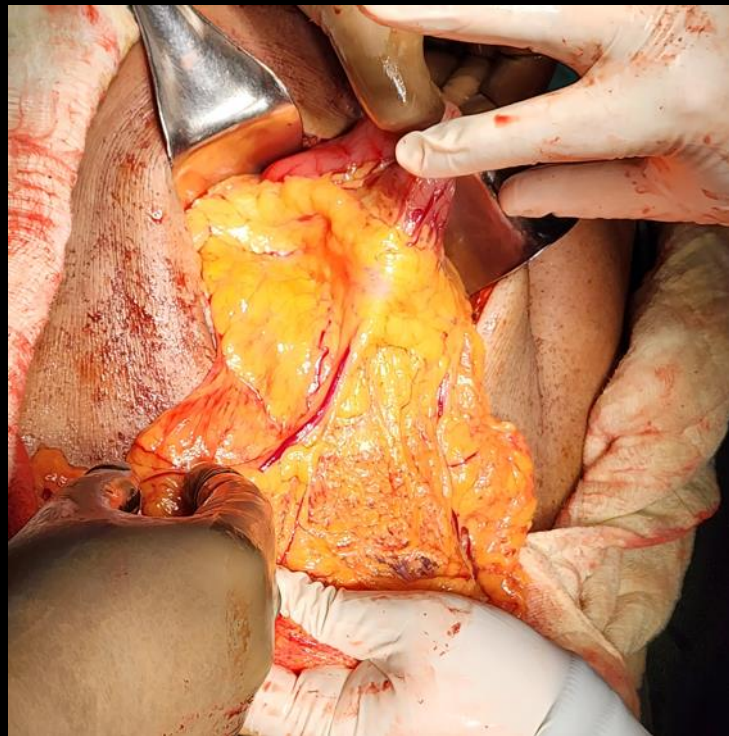
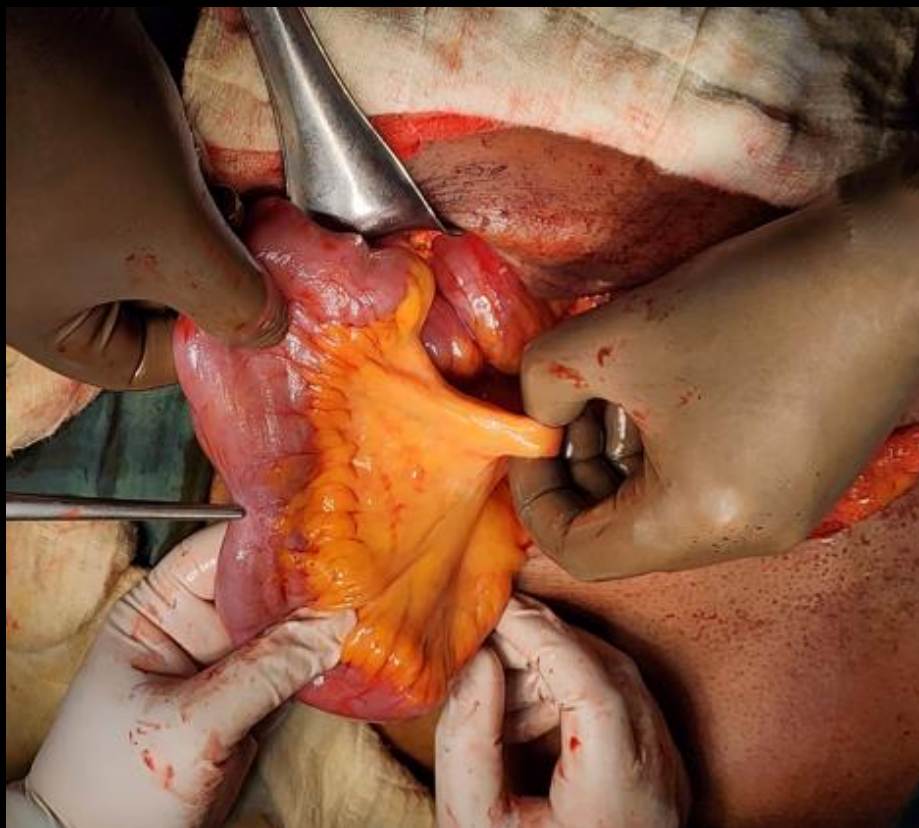


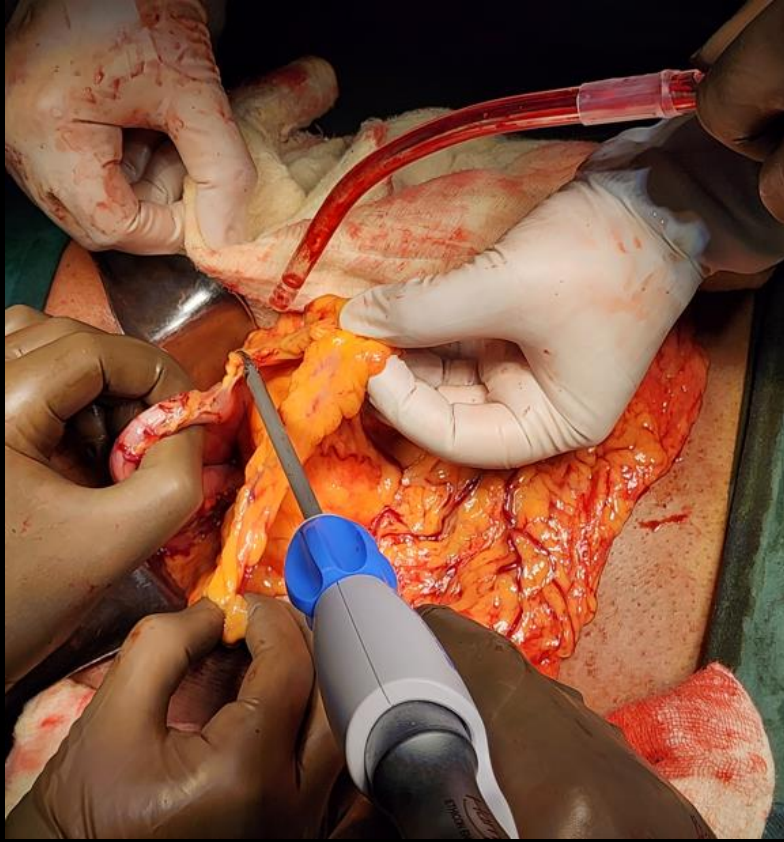


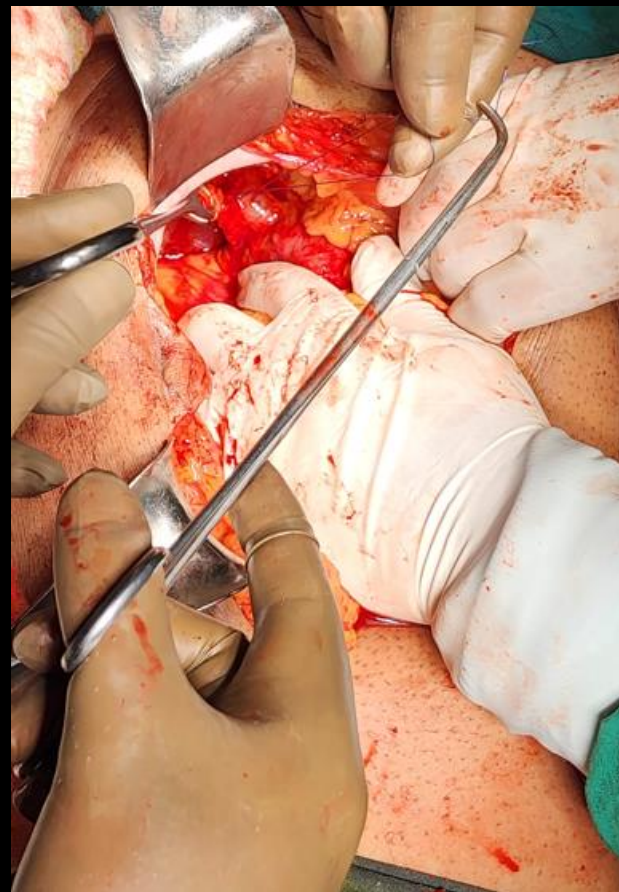
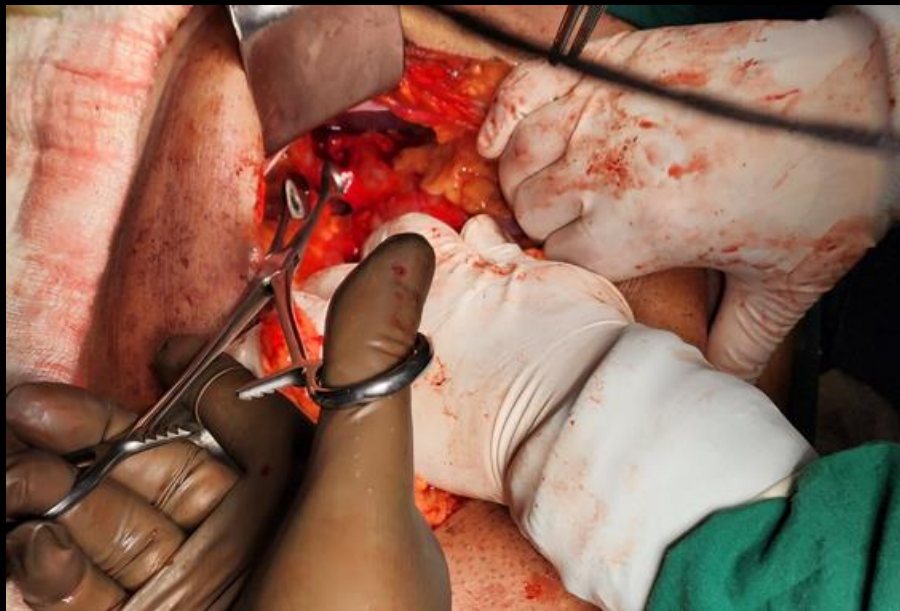






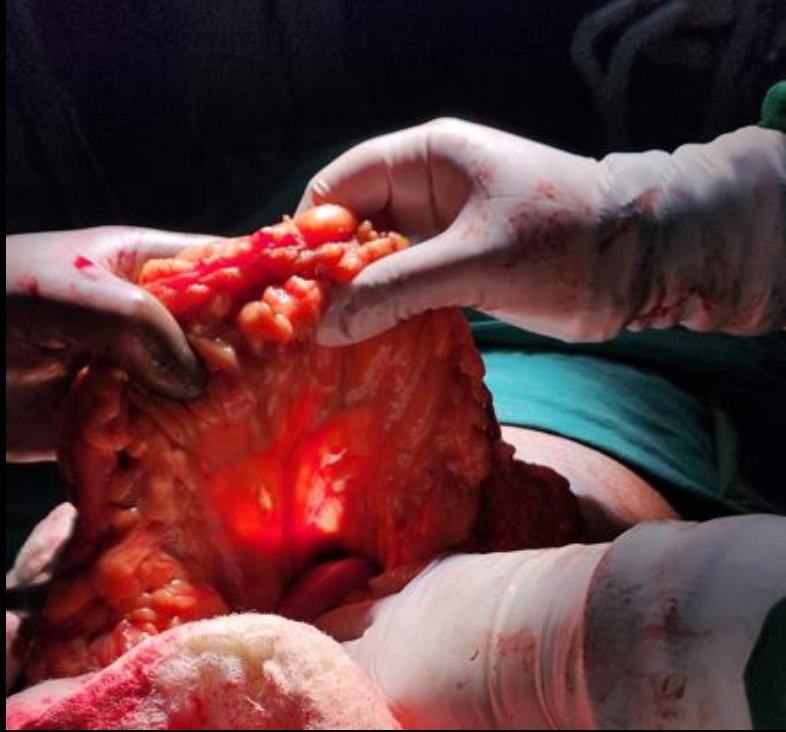


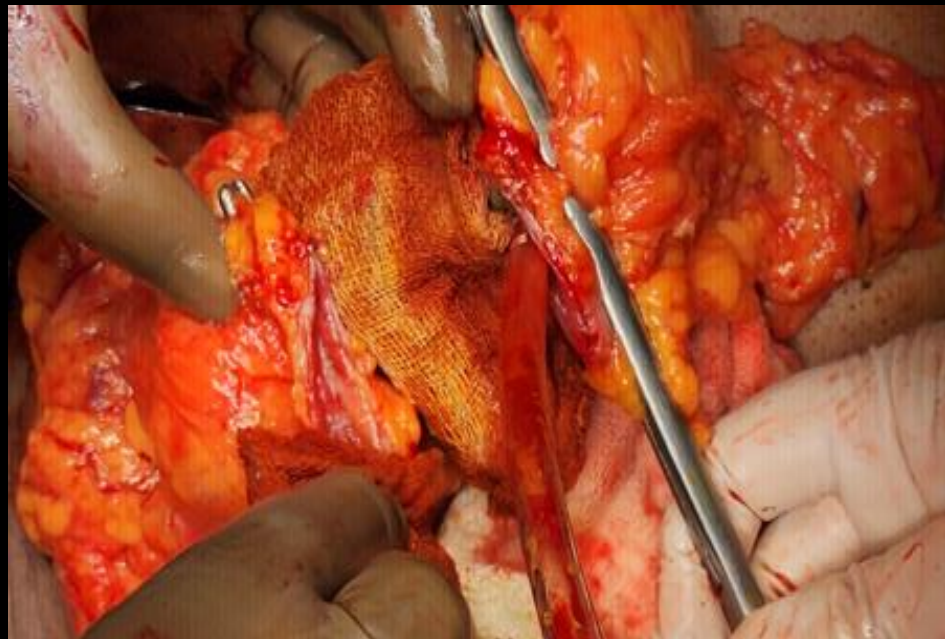
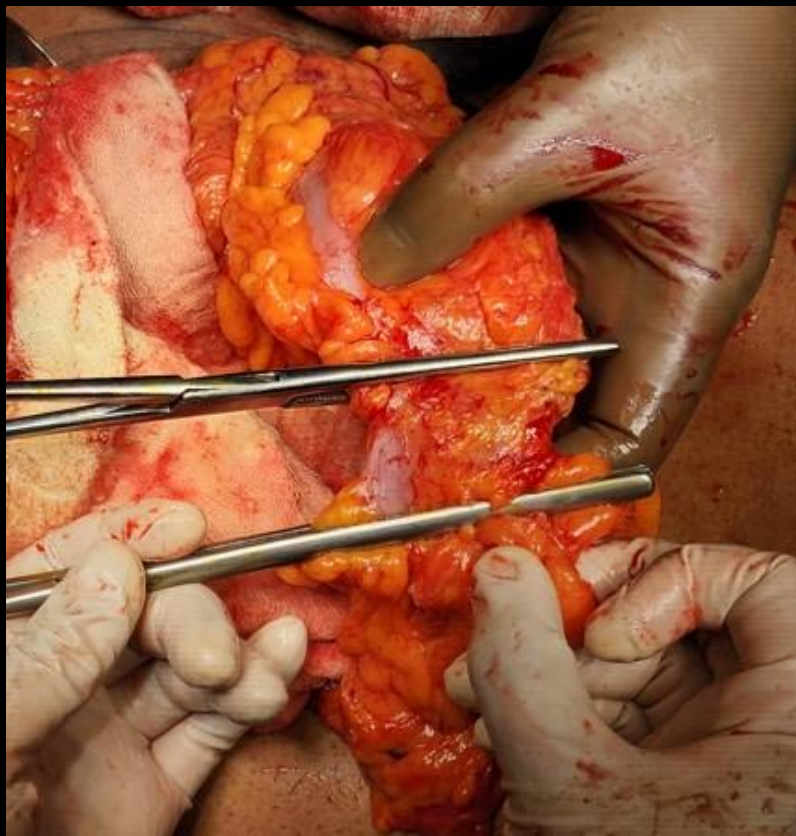


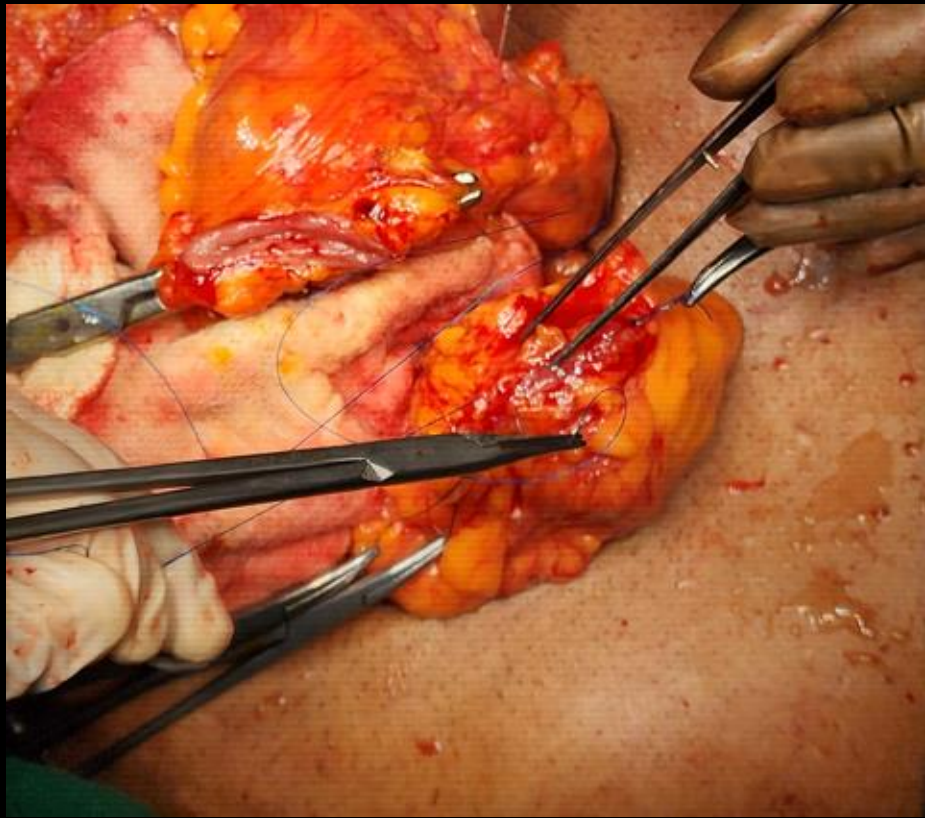


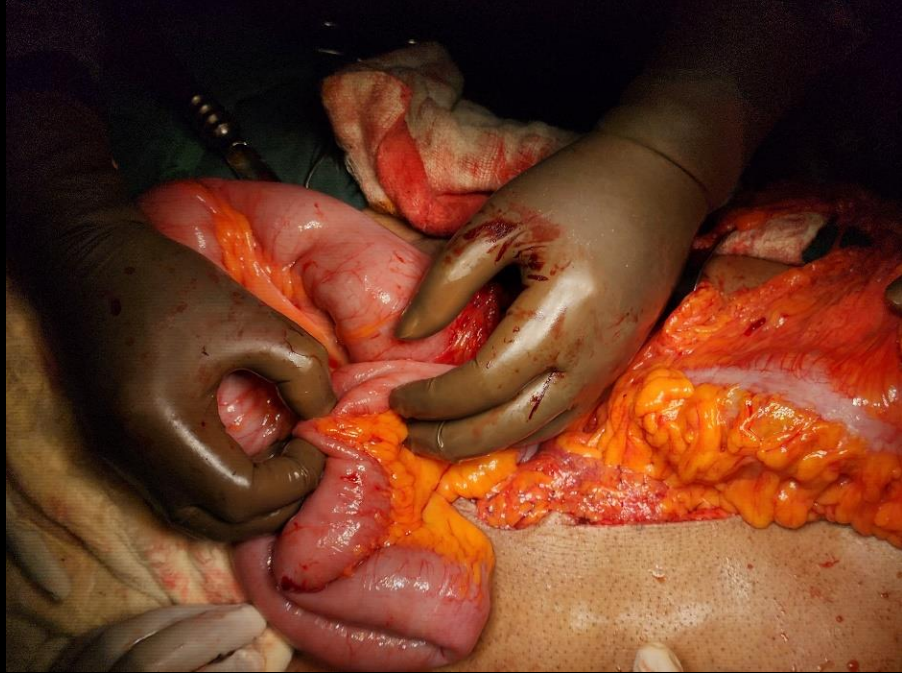


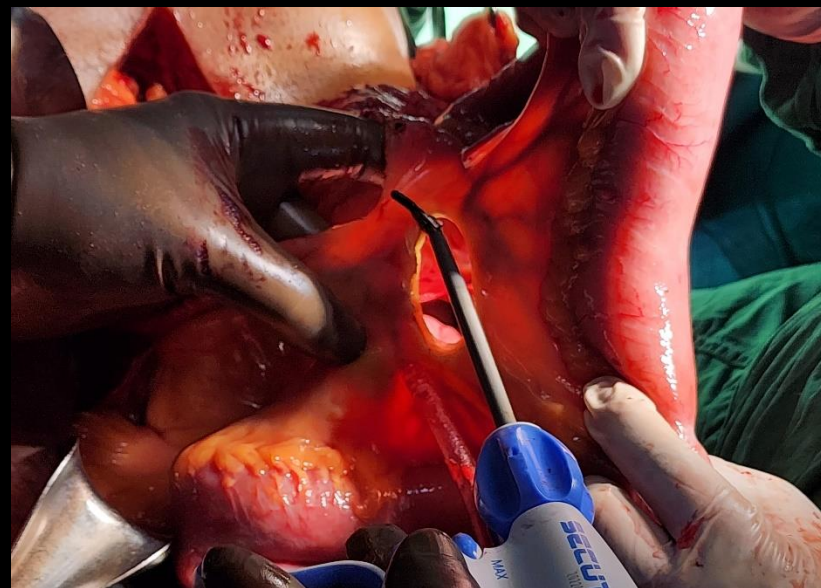
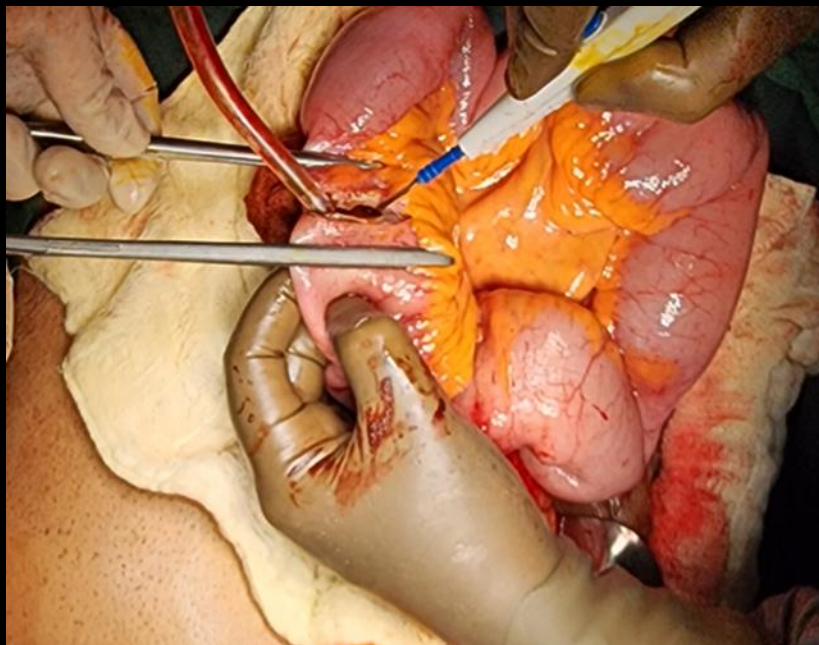




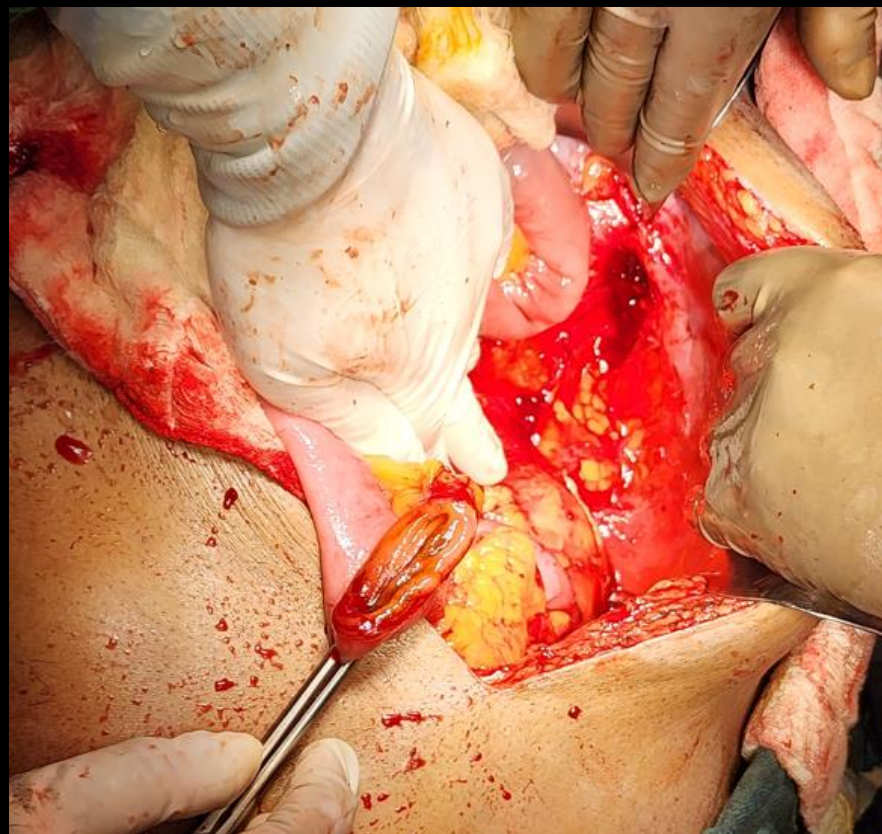


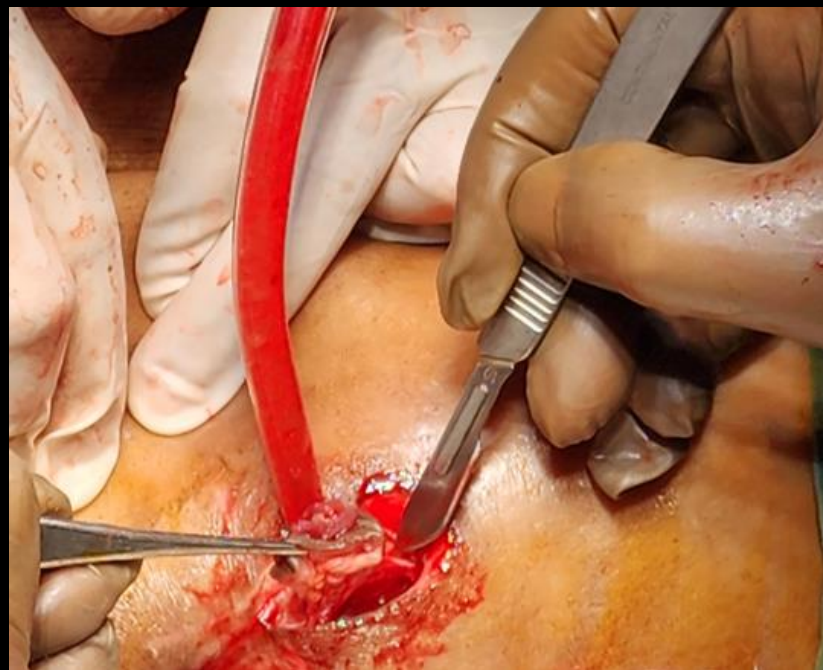


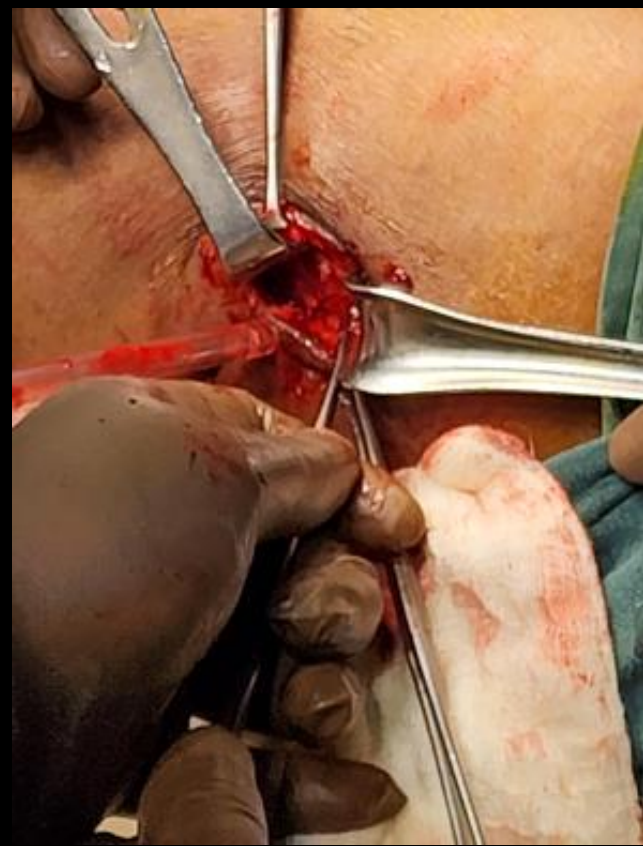


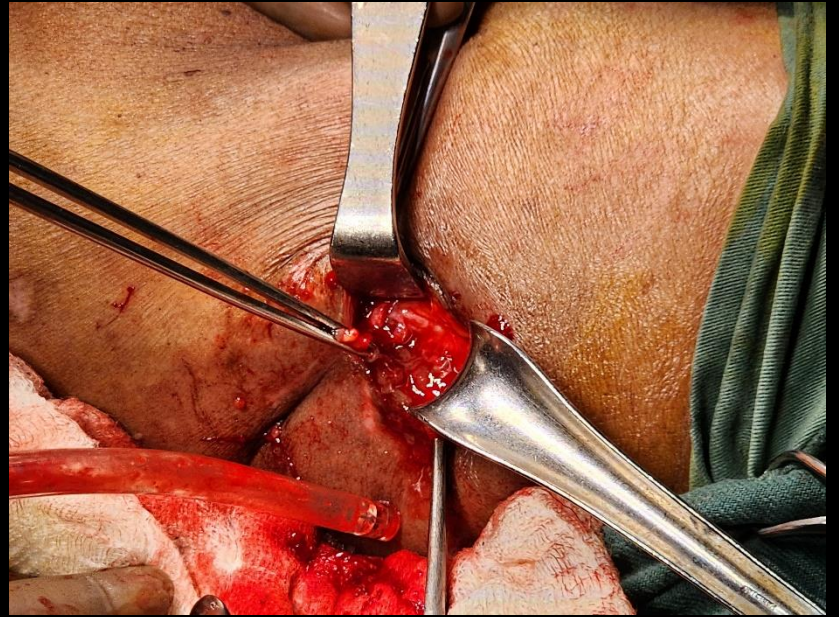
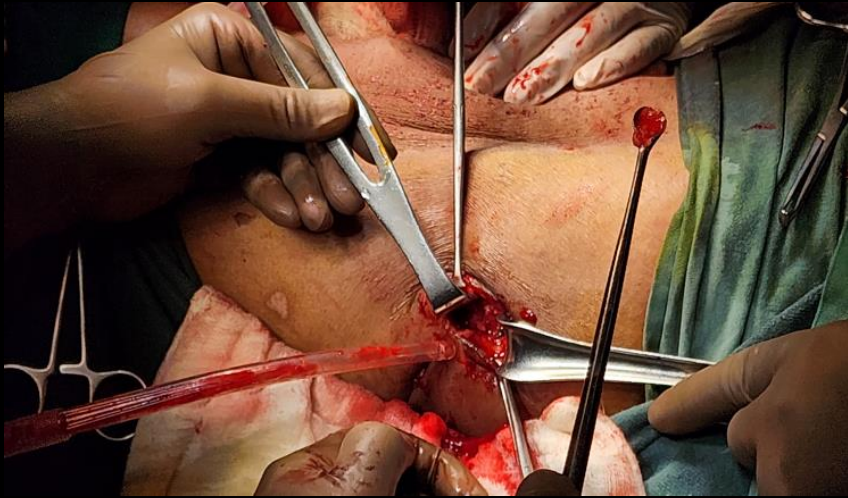


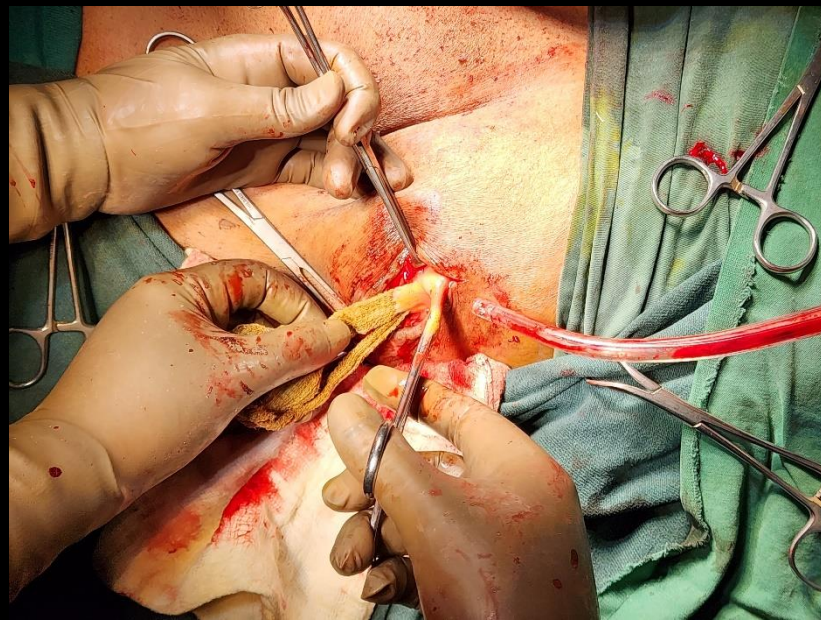
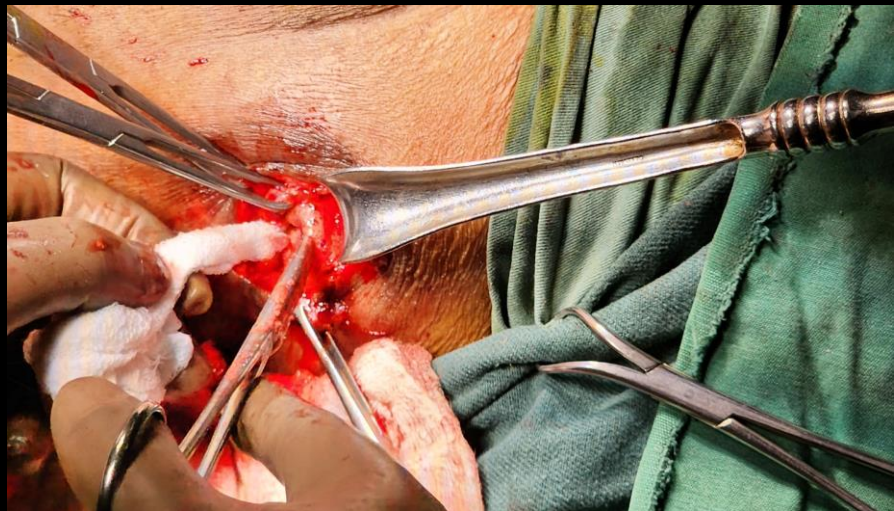




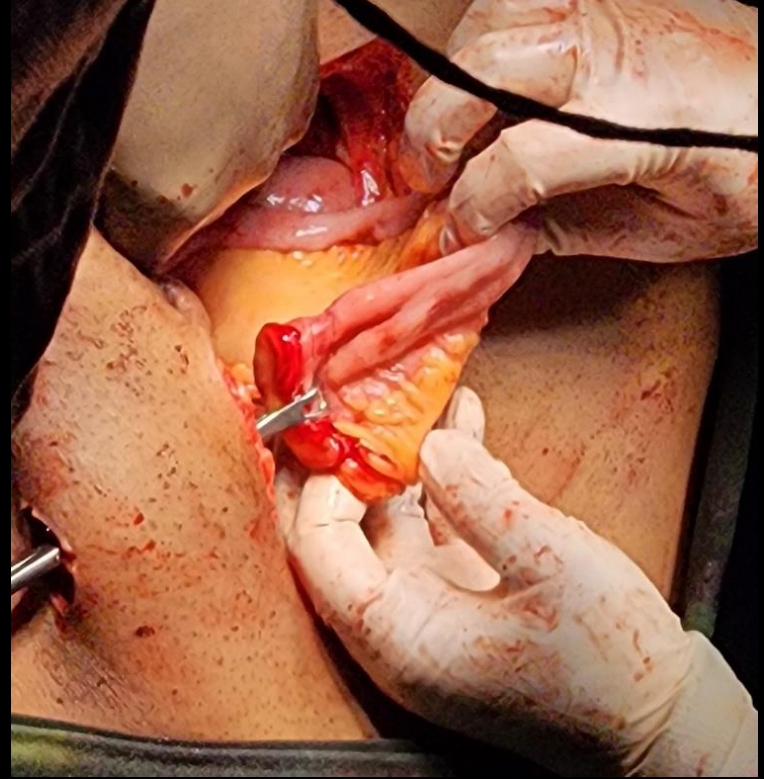
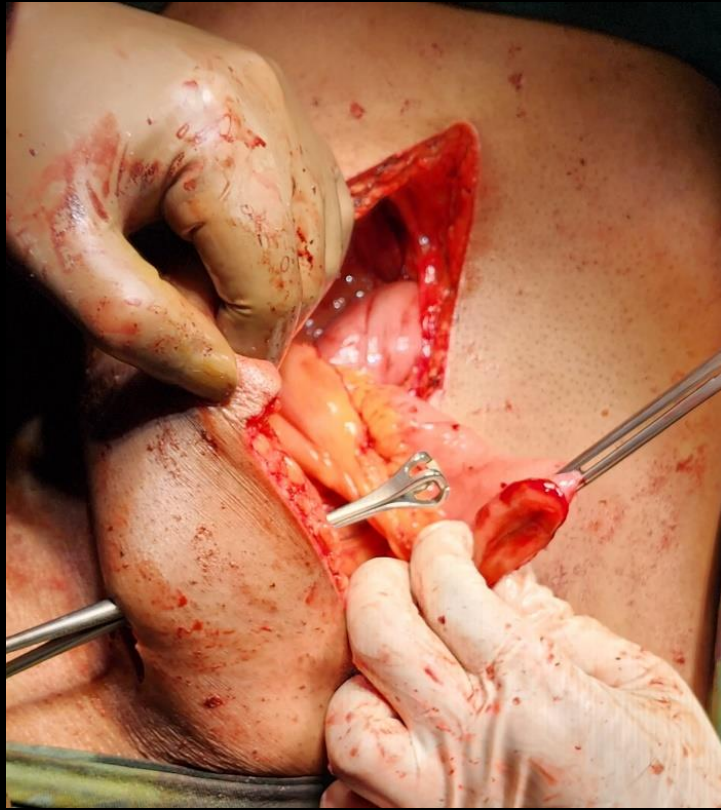


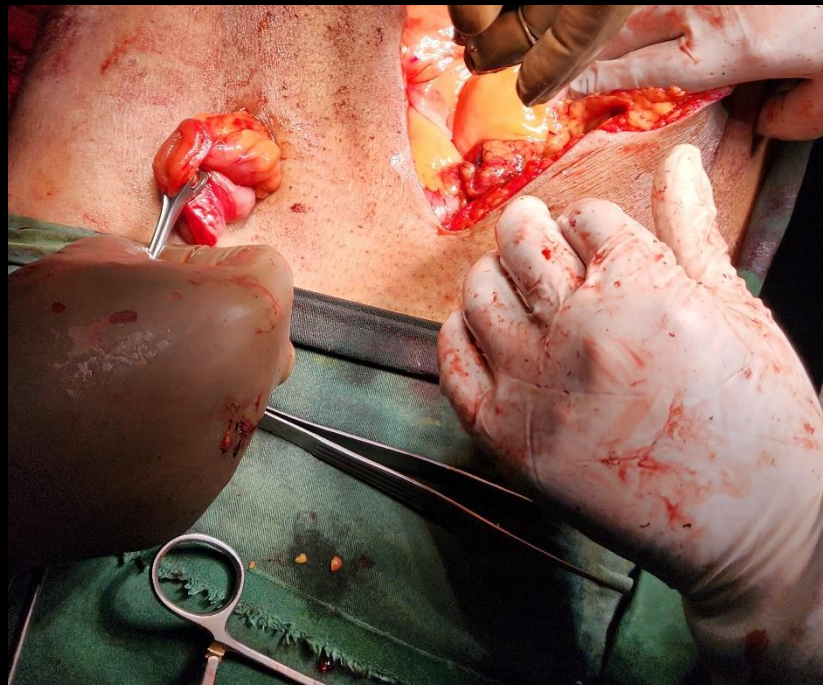


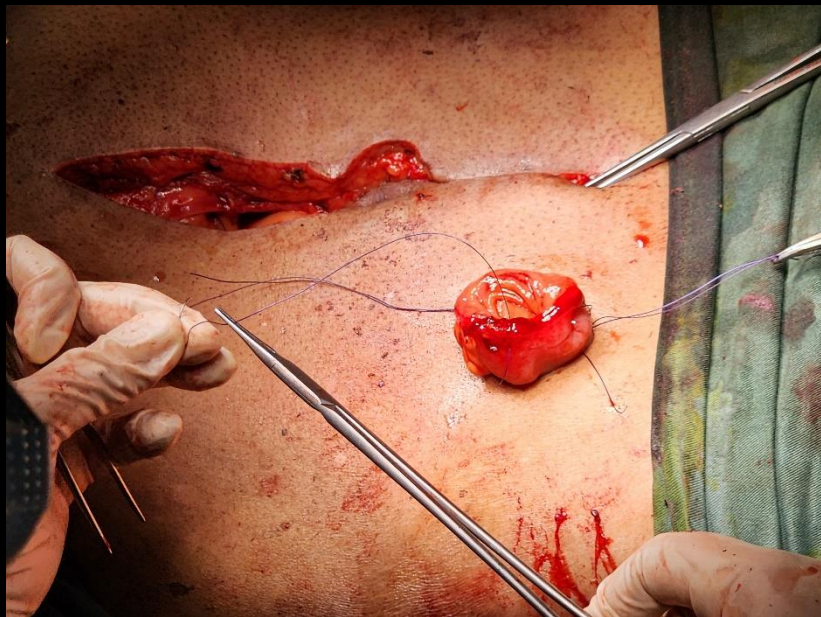






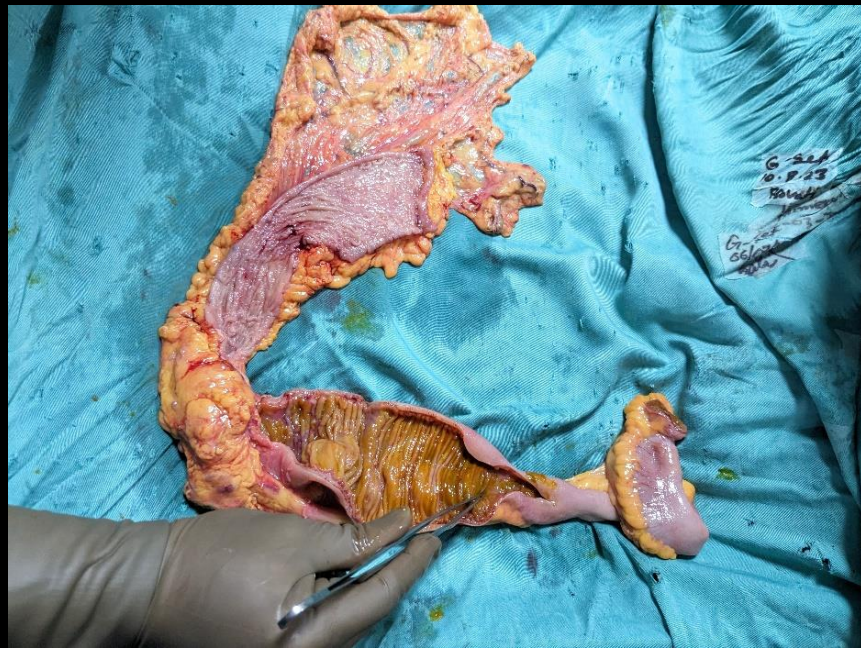
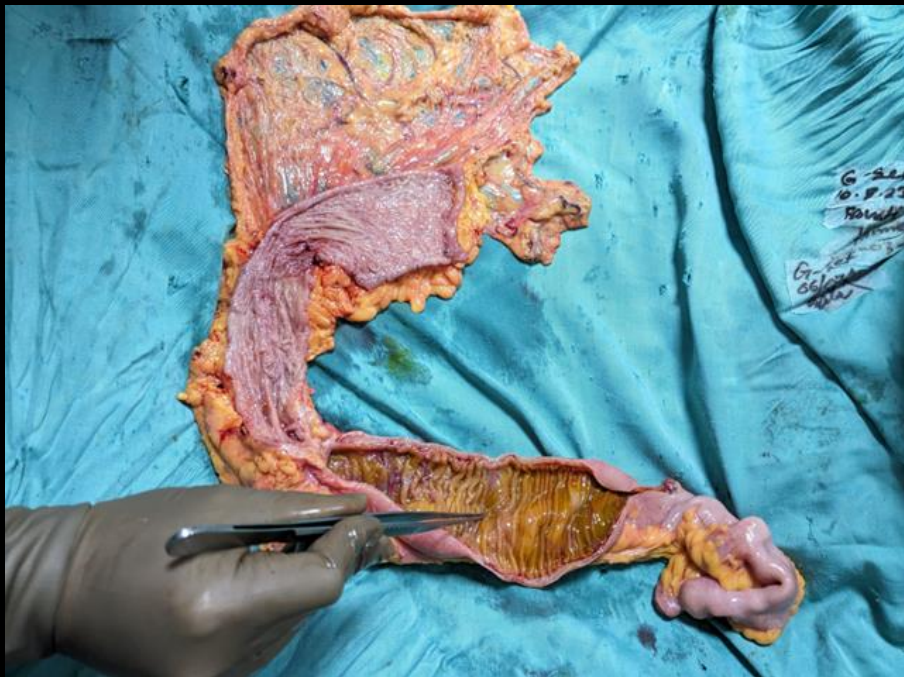












POD	Follow Up	Treatment
Day of operation	On examination: Pulse: 80 beats/min BP: 120/60 mmHg SPO2: 97% with 2L O2 Abdomen: soft & tender in operative area Bandage: Dry Bowel: not moved Bowel sound: Absent Urine Output: 460ml NG Collection: 70 ml Drain Tube Collection: 80ml (serousanguinous) Total Intake :950ml	<ul style="list-style-type: none">• NPO till further order• I/V fluid neutralized with insulin.• Inj Meropenem 1gm I/v 8 hourly• Inj Amikacin 500mg I/v 8 hourly• Inj Omeprazole 40mg I/v 12 hourly• Inj Pethidine Hydrochloride 75mg 8 hourly• Inj Ondansetron 8mg 8hourly *CV Line wash with diluted heparin solution 4 hourly(500iu in 500ml normal saline)

POD	Follow up Treatment	Treatment
1st-3rd	<ul style="list-style-type: none">• All the vital signs are normal.• Ileostomy was functional- 2nd POD• On 3rd POD the ribbon pack dressing was replaced in the posterolateral abdominal wounds.	<ul style="list-style-type: none">• Sips of water allowed f/b liquids• Rest of the treatment remained the same.
4th	<ul style="list-style-type: none">• All the vitals are normal• Catheter was removed and tip sent for c/s• midline wound was checked• Posterolateral abdominal wound dressing changed	<ul style="list-style-type: none">• Diabetic diet allowed along with adjusted insulin

POD	Follow UP	Treatment
5th	<ul style="list-style-type: none">• Drain tube collection:25ml(serous)• Drain tube was removed and tip sent for c/s• Histopathology reports came.	<ul style="list-style-type: none">• Inj Amikacin was omitted• Rest of the treatment remained the same.

Histopathological Reports (04/08/2023)

Specimen:

Resected terminal ileum, caecum, ascending colon & part of mesentery with vermiform appendix

Report

Adenocarcinoma, mixed type, well differentiated
(pT2N0Mx)

Histopathological Reports (04/08/2023)

- Specimen- Mesenteric Lymph Node

Finding-No granuloma or malignancy seen

- Specimen-Curetted soft tissue from lateral abdominal wall

Findings - Metastatic Adenocarcinoma

Histopathological Reports (04/08/2023)

Specimen-Sinus Tract

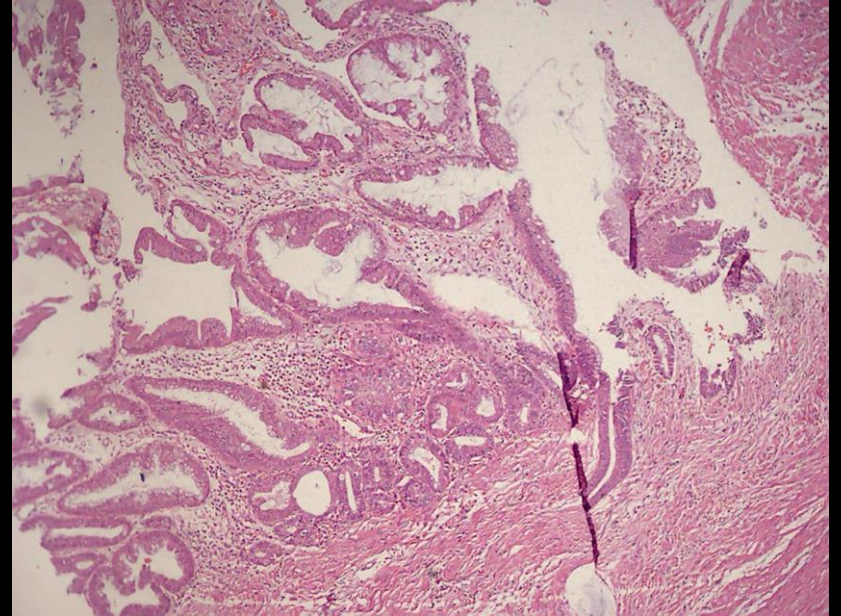
Finding-Compatible with sinus tract and ulcer

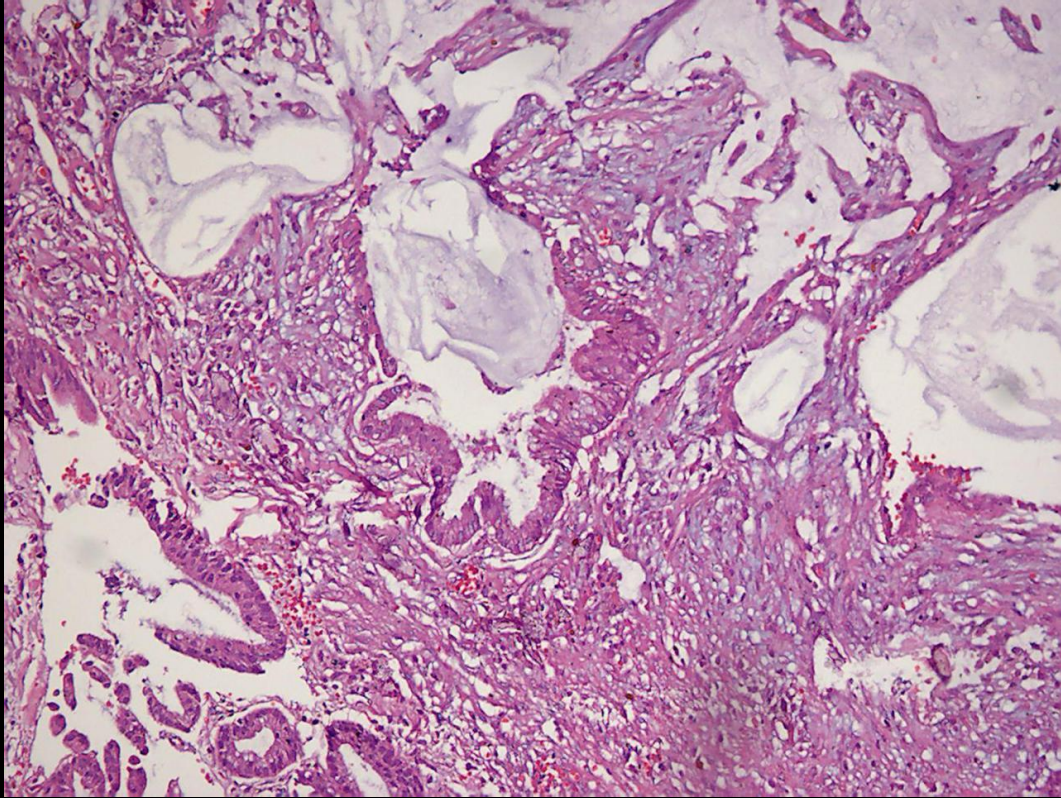
Oncological Consultation

- Adv.: Slide review
- **Reviewed report (24/08/2023):** Adenocarcinoma, mixed type, well differentiated (pT2N0Mx)
- **Immunocyto-histochemistry**
Finding-The tumor is protein proficient and negative for MMR

Review of slides (24/09/2023)

- Adeno carcinoma, grade-1, well-differentiated, invaded through muscularis mucosa.





POD	Follow up Treatment	Treatment
7th	<ul style="list-style-type: none"><li data-bbox="253 216 890 347">• All the vital signs are normal.<li data-bbox="253 369 952 505">• Catheter tip c/s report: No growth	<ul style="list-style-type: none"><li data-bbox="1045 216 1709 347">• Rest of the treatment remained same.
8th	<ul style="list-style-type: none"><li data-bbox="253 543 935 674">• All the vital signs were normal.<li data-bbox="253 696 987 827">• CBC,S. Electrolyte and S. Albumin was done.	<ul style="list-style-type: none"><li data-bbox="1045 543 1709 674">• Rest of the treatment remained same.

POD	Follow up Treatment	Treatment
9th	<ul style="list-style-type: none">• Drain tube tip c/s report >No growth	<ul style="list-style-type: none">• 6 egg whites added to diet• Dub water, Syp Potassium.• 2units of fresh frozen plasma
10th	<ul style="list-style-type: none">• Alternate stitches were removed	<ul style="list-style-type: none">• The treatment remained the same.
11th-12th	<ul style="list-style-type: none">• CBC , S. Electrolyte and albumin was repeated which were within normal limit.	<ul style="list-style-type: none">• The treatment remained the same.

POD	Follow up	Treatment
13th-14th	<ul style="list-style-type: none"><li data-bbox="446 295 1006 514">• All stitches were removed on 13th POD	<ul style="list-style-type: none"><li data-bbox="1161 295 1798 345">• Bactrocin ointment
15th	<ul style="list-style-type: none"><li data-bbox="446 647 1103 865">• Secondary wound closure of the sinus tract was done	

Operation Note

- Date : 08/9/23
- Time : 12:30 pm- 2:00pm
- Name : Fazlur Rahman
- Age : 58years
- Name of the operation : Secondary closure of healing wounds
- Anaesthesia- Local anaesthesia



- **Wound swab c/s**- Cladophialophora spp.
Tab Voriconazole 200mg 1+0+1 was added.
- **CV line tip c/s** - No growth.
- **S. Sodium** - 124mmol/l
- **SGPT**- 44U/L
- **S. Creatinine**-1.6mg/dl

Advice during discharge

- Care of the stoma
- Regular medication
- Follow up with an oncologist after 15 days and chemotherapy accordingly.
- Readmission after 4 months for restoration of gut

Re-admission after 4 months

- On 31/1/24 he was admitted to Green Life Medical College And Hospital
- Well healed midline and posterolateral abdominal wounds.
- Functioning ileostomy
- He did not take chemotherapy

Investigations for evaluation

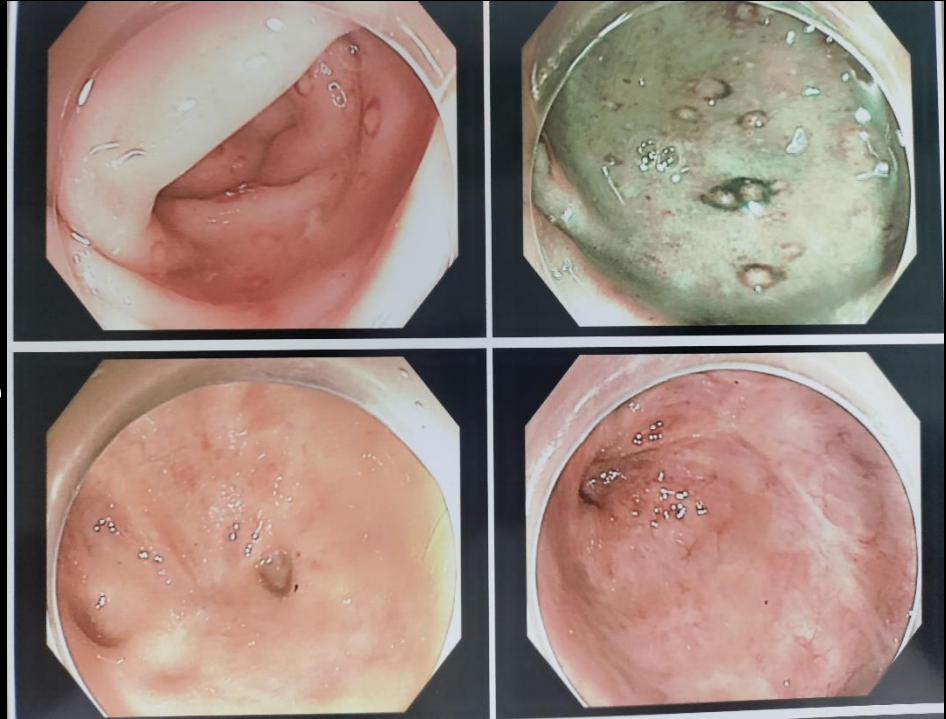
- CEA- 5.36 ng/ml

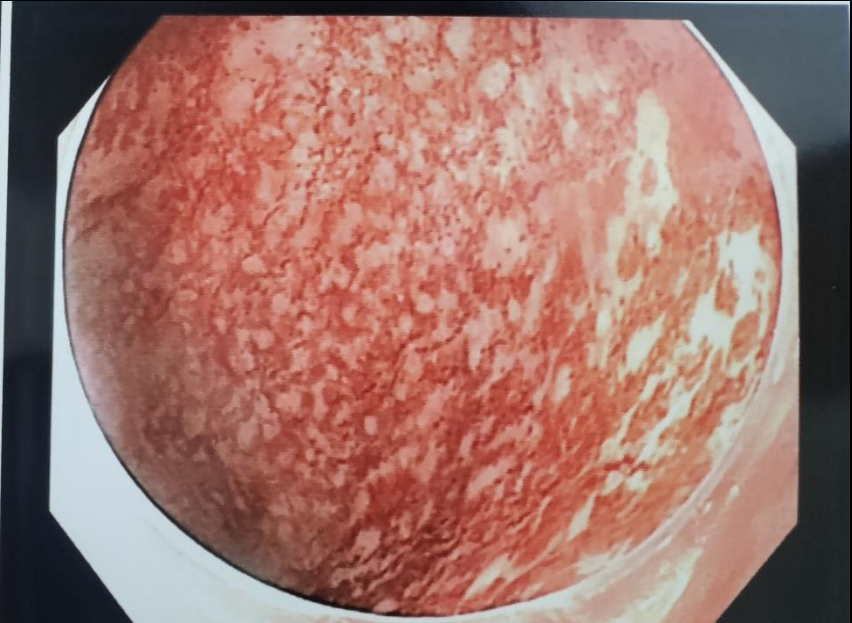
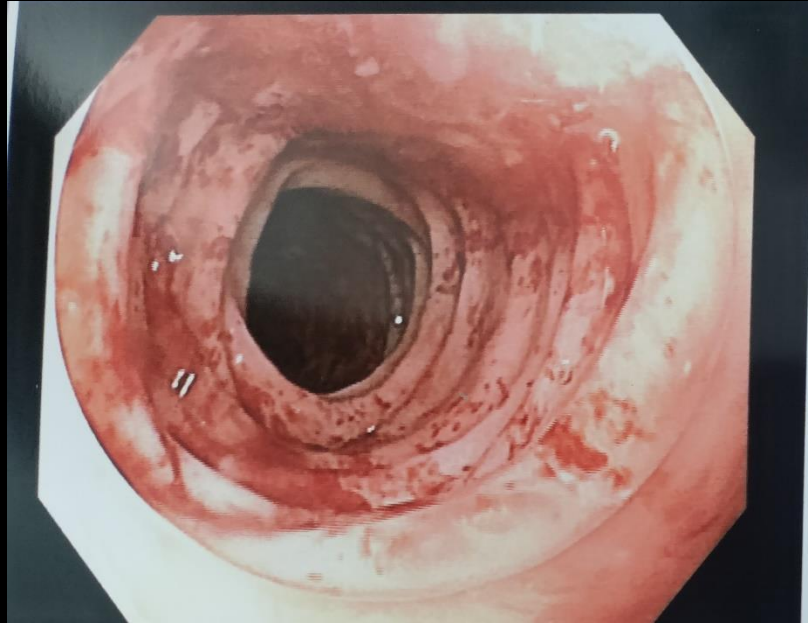
- Colonoscopy report (10/02/2014):

Multiple superficial ulcers in colon, no stricture or neoplastic lesion seen.

Comments: Ulcerative colitis with first degree haemorrhoids

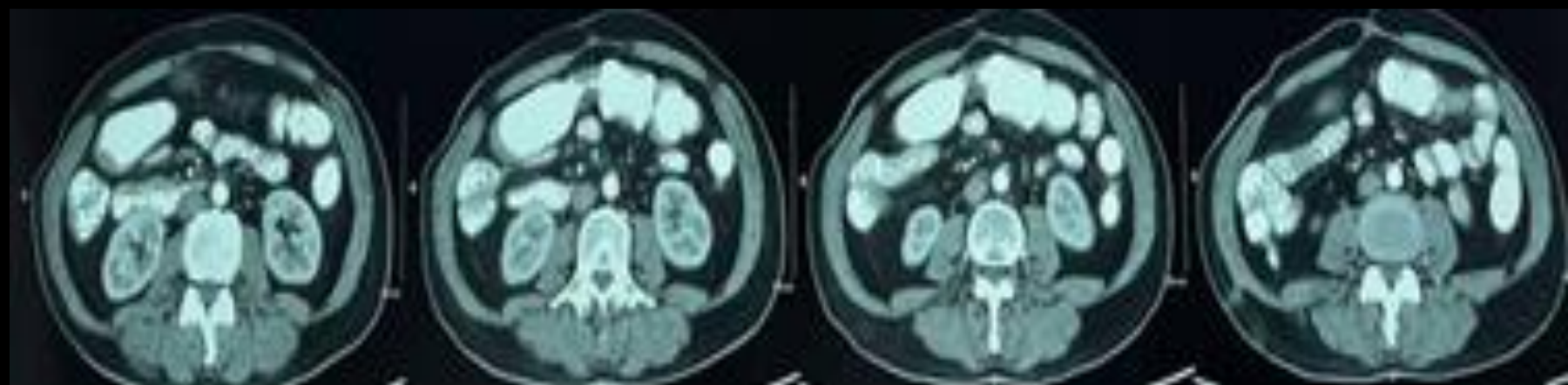
1. Sigmoid colon
2. Multiple superficial ulcers
3. Closed end of transverse colon
4. Multiple superficial ulcers





CT Scan of Whole Abdomen

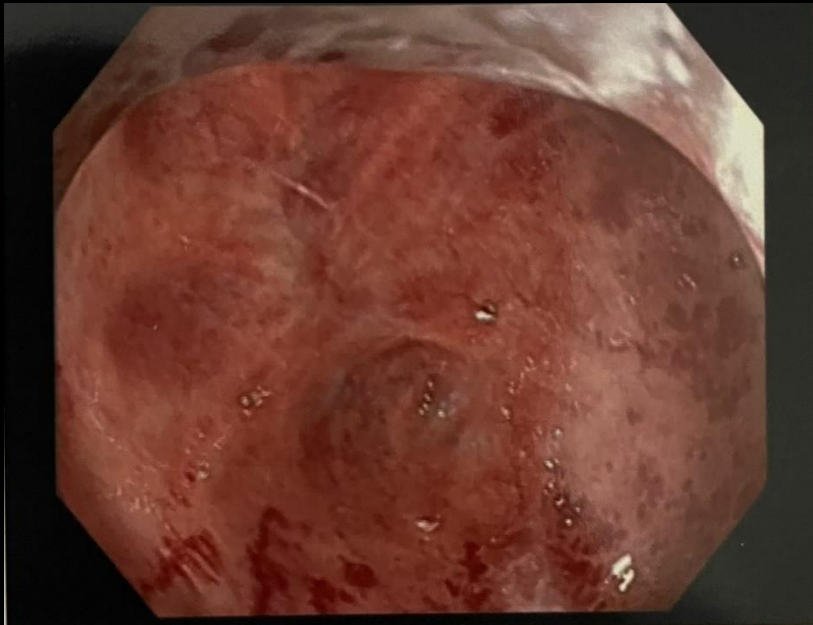
- Post operative (right hemicolectomy) status of ascending colon showing multifocal wall thickening at major part of transverse colon.
- Inflammatory thickening/recurrent infiltrative growth. Colonoscopy & histopathological correlation recommended for further evaluation.
- Multiple prominent & subcentimetric lymph nodes at right side of the mesentery.



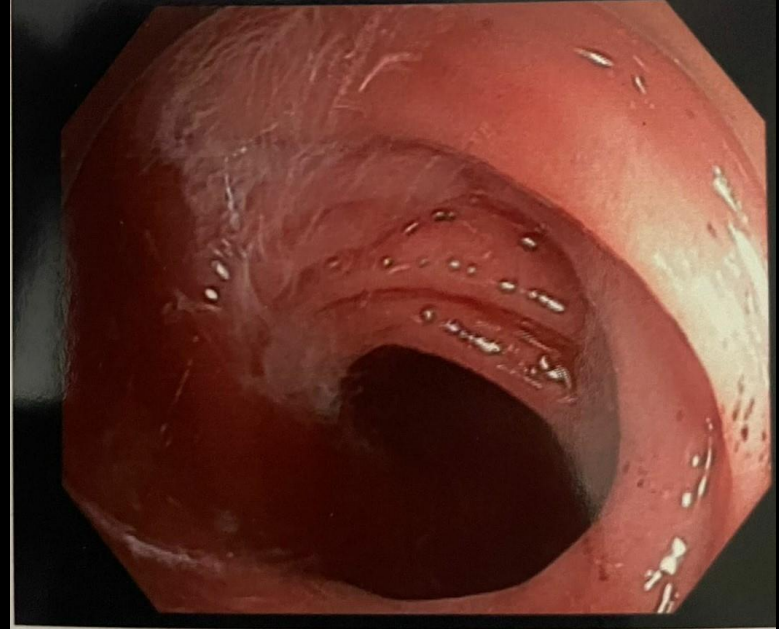
Medical treatment

- Treatment for Ulcerative colitis:
Tab 5-amino salicylic acid 400mg 2+0+2
- Repeat Colonoscopy was done after 14 days of treatment
- Findings: No obvious ulcer seen
Comments: Ulcerative colitis in remission phase with normal terminal ileum

Colonoscopy repeated



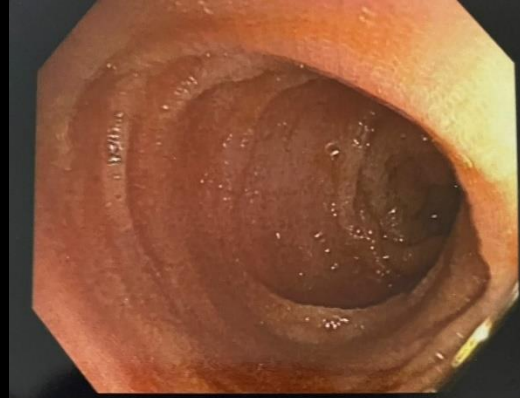
Site of closure at transverse colon



Descending colon



Sigmoid colon



Ileum



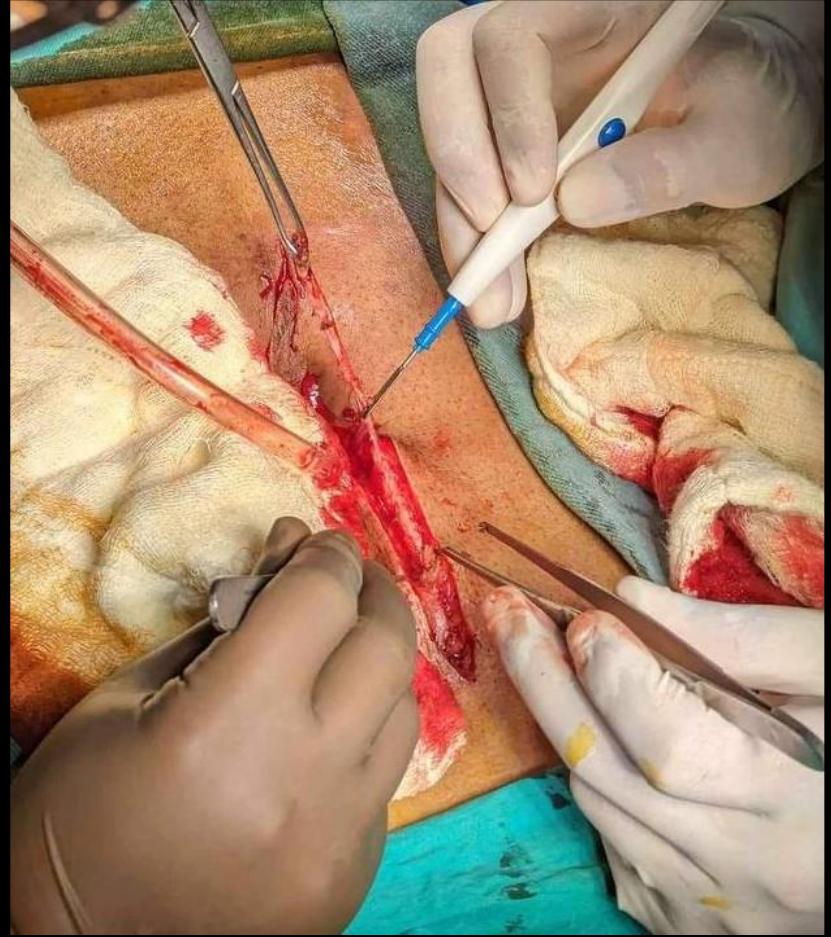
Plan Of Treatment

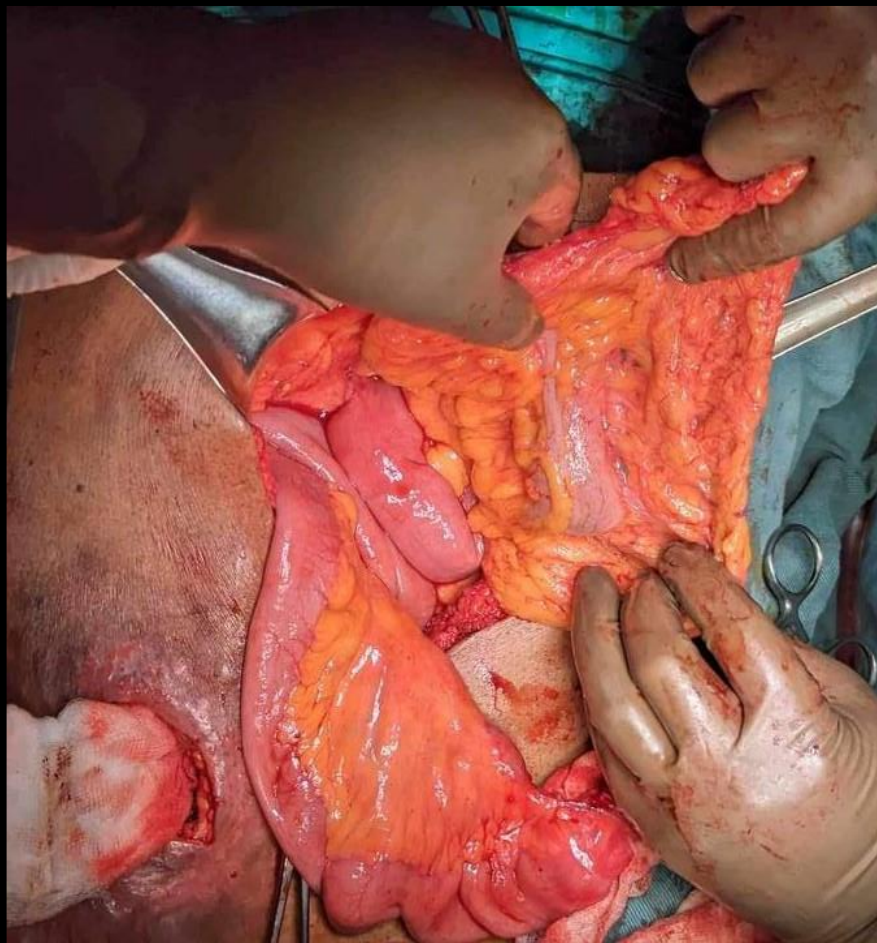
Laparotomy followed by restoration of gut continuity

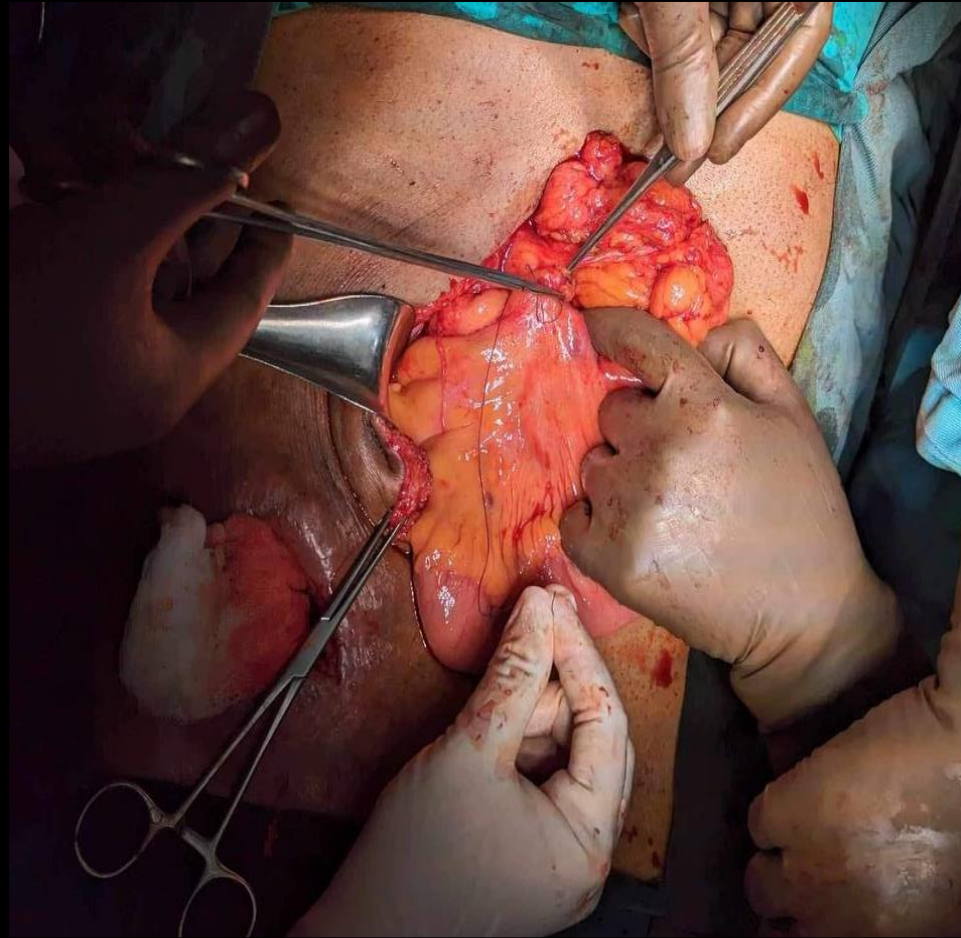
Investigations for GA fitness

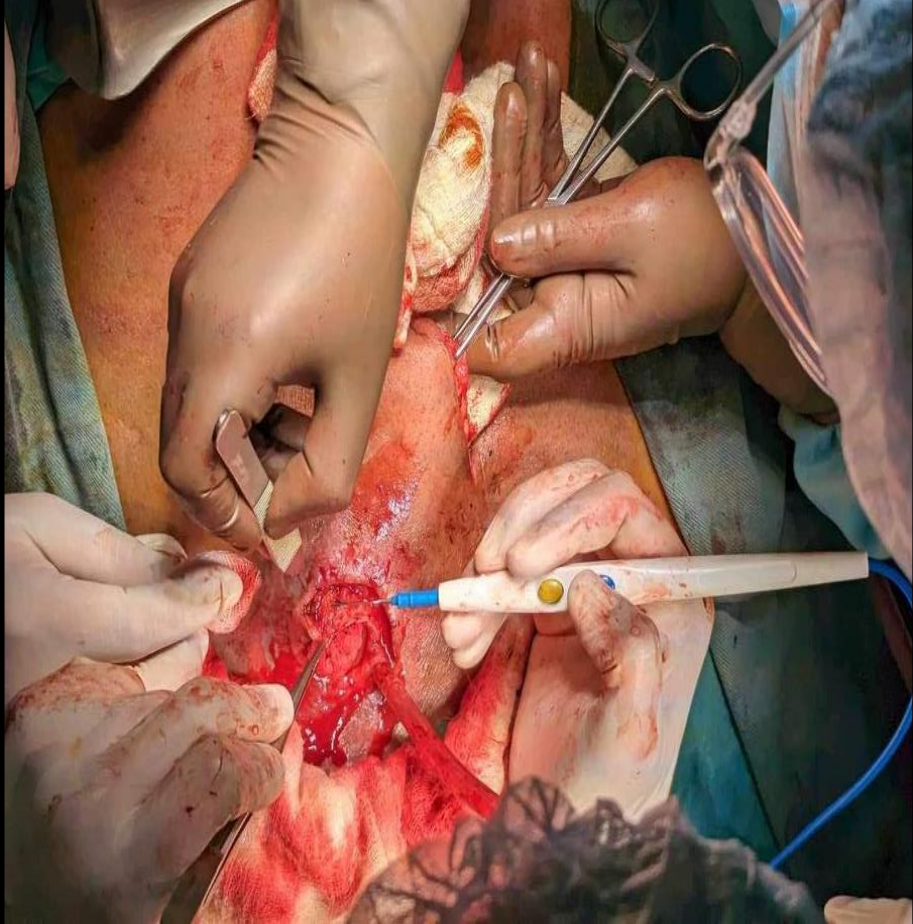
Investigations for GA fitness

- **CBC:** normal
- **S. Electrolytes:** normal
- **S. Albumin-** 33g/l
- **S. Calcium-**10 mg/l
- **S. Magnesium-** 1.8mg/dl
- **Urine RME-** normal
- **X-ray chest-** Normal
- **Anti HCV-** Negative
- **HbsAg-**Negative
- **ECG-** Normal
- **S. Creatinine-** 1.1gm/L



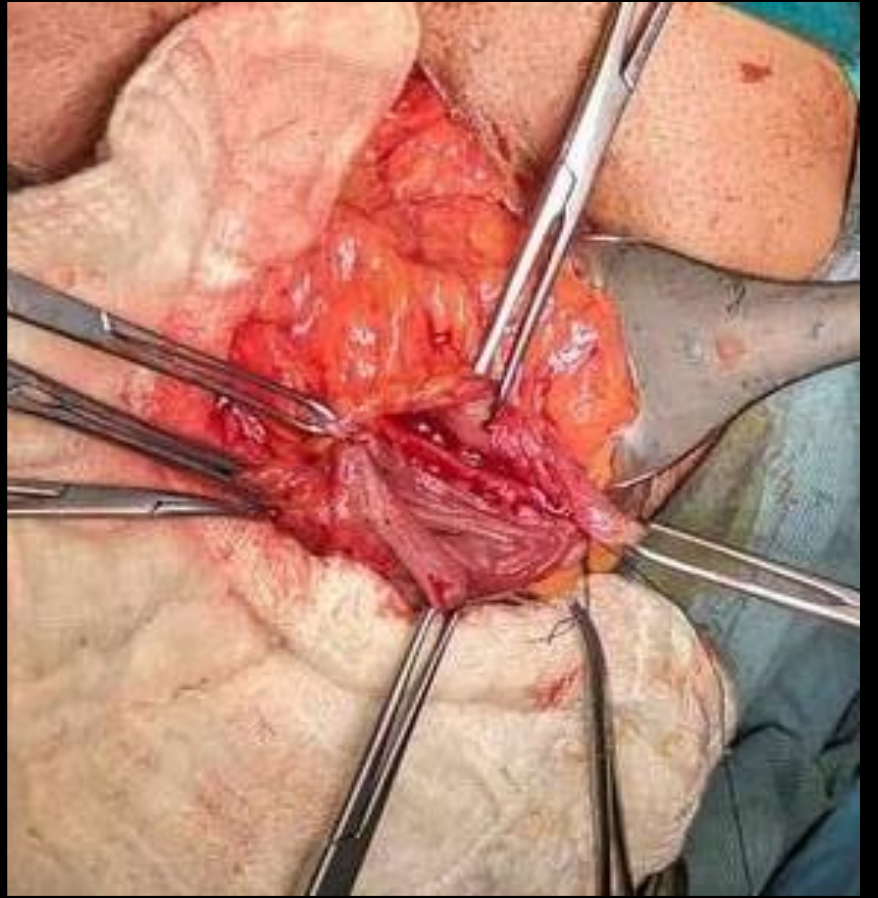
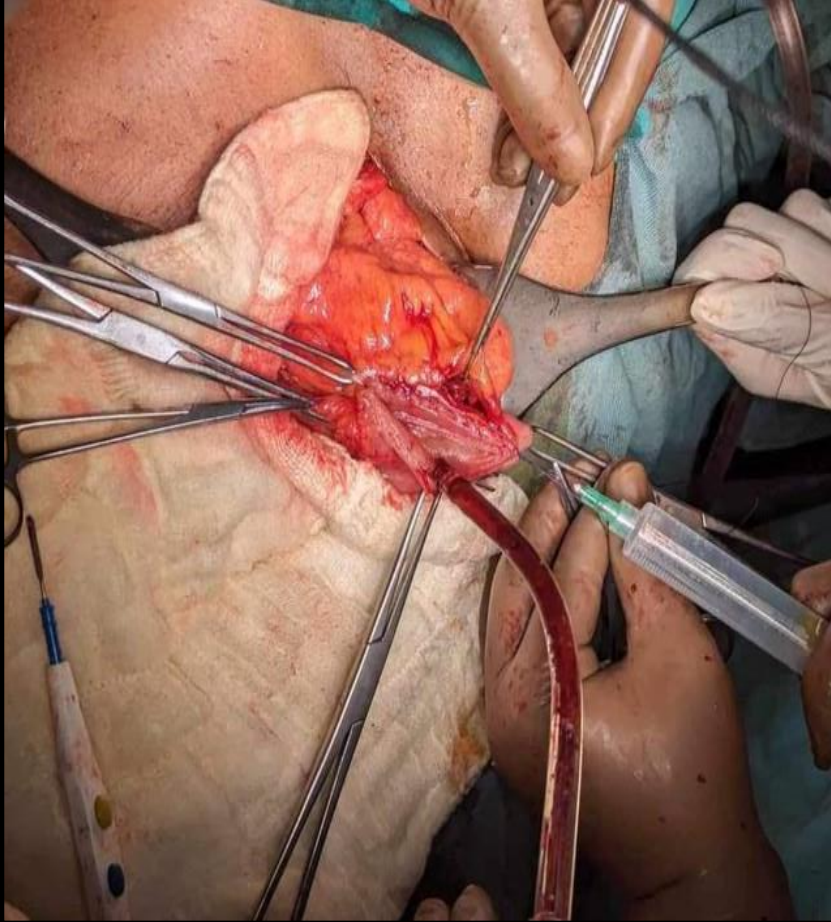


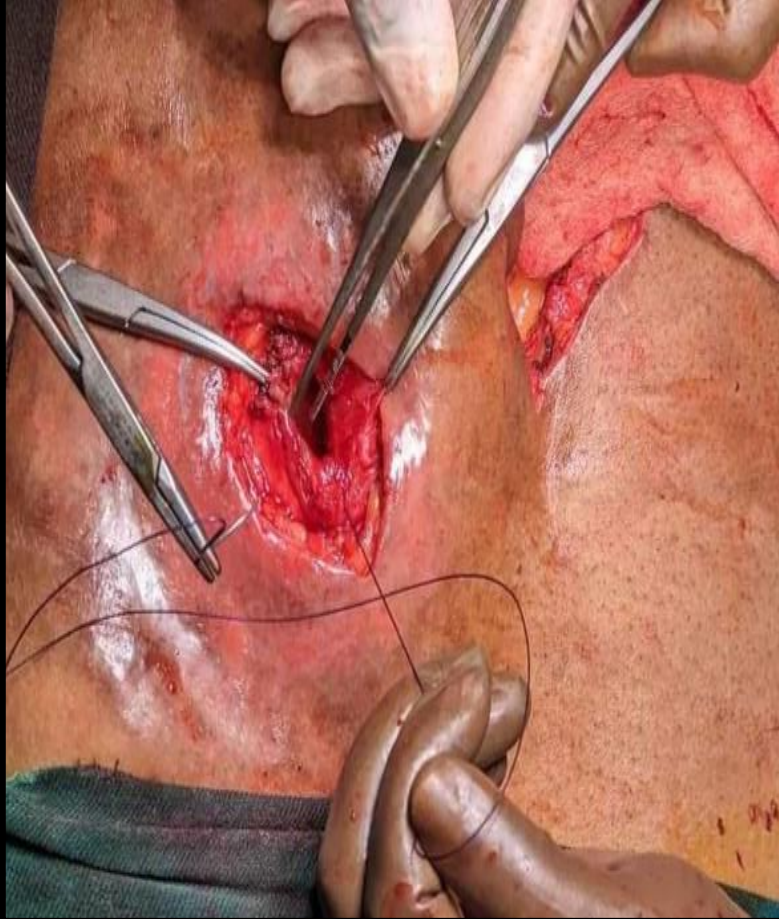














POD	Follow up	Treatment
Day of operation	<p>On examination:</p> <p>Pulse: 85 beats/min</p> <p>BP: 110/80 mmHg</p> <p>PO2: 96% with 2L O2</p> <p>Abdomen: soft & tender in operative area</p> <p>Bandage: Dry</p> <p>Bowel sound: absent</p> <p>Urine Output: 700ml</p> <p>NG Collection: Nil</p> <p>Drain Tube Collection: 180ml</p>	<p>NPO till further order</p> <p>Inf Hartsol 1L + Inf DNS 1L</p> <p>Inf DA 500ml</p> <p>Inj Ceftriaxone 1gm</p> <p>Inj. Amikacin 500 gm</p> <p>Inj Omeprazole 40mg</p> <p>Inj Ondansetron 8mg</p> <p>Inj Pethidine Hydrochloride</p> <p>Inj Ketorolac Tromethamine</p> <p>Tab 5-amino salicylic acid 400mg 2+0+2</p>

POD	Follow up	Treatment
4th	<ul style="list-style-type: none"><li data-bbox="253 203 904 259">• Bowel sound: Sluggish<li data-bbox="253 279 915 412">• Catheter was removed and tip sent for c/s.	<ul style="list-style-type: none"><li data-bbox="1033 203 1792 259">• Sips of water was allowed.<li data-bbox="1033 279 1773 336">• Fluid was reduced to 1.5L<li data-bbox="1033 355 1860 489">• Tab Ketorolac Tromethamine was omitted.
5th	<ul style="list-style-type: none"><li data-bbox="253 607 896 663">• Bowel Sound: Present<li data-bbox="253 683 993 816">• Drain Tube collection was 20ml<li data-bbox="253 836 919 1046">• S. Electrolyte and S. Albumin and complete blood count was done.	<ul style="list-style-type: none"><li data-bbox="1033 607 1734 663">• Liquid diet was allowed.<li data-bbox="1033 683 1727 740">• Fluid was reduced to 1L<li data-bbox="1033 760 1889 893">• Supp Diclofenac Sodium 50mg P/R twice daily was added

Histopathology

- Specimen

- Tissue from terminal ileum

- Report

- Stomal Ulcer

Contd.

- CBC- within normal limit
- S. Electrolyte- within normal limit
- S. Albumin-30gm/l

POD	Follow up	Treatment
6th	<ul style="list-style-type: none"> Vitals were normal. Drain Tube was removed. Drain Tube was removed and tip sent for c/s 	<ul style="list-style-type: none"> Semi solid diet was allowed. Fluid was omitted All medication in oral form. Vitamin C and B complex was added
7th -8th	<ul style="list-style-type: none"> Vitals were normal. On 7th POD Catheter tip c/s- No Growth 	<ul style="list-style-type: none"> Rest of the treatment plan remained as before.
9th	<ul style="list-style-type: none"> Vitals were normal Wound was checked, there was no sign of surgical site infection. 	<ul style="list-style-type: none"> Rest of the treatment plan remained as before. Normal diet was allowed with 6 egg whites.
10th	<ul style="list-style-type: none"> Vitals were normal Alternate stitches were removed. S. Electrolyte was within normal limit 	<ul style="list-style-type: none"> Rest of the treatment plan remained as before.

POD	Follow up	Treatment
14th	<ul style="list-style-type: none"><li data-bbox="297 157 784 295">• All stitches were removed<li data-bbox="297 325 942 464">• Plan of discharge on 15th POD	<ul style="list-style-type: none"><li data-bbox="1051 157 1870 295">• Rest of the treatment plan remained as before.
15th	<ul style="list-style-type: none"><li data-bbox="297 615 699 754">• Patient was discharged.	Diet - Diabetic Tab Vitamin B Complex 1+0+1 Tab Vitamin C 250mg 1+0+1 Cap Omeprazole 20mg 1+0+1 Tab 5-Aminosalicylic Acid 2+0+2

THOUGHT PROVOKING

- What happened to the malignancy?
- Do we overprescribe chemotherapy?
- Was there a histopathological dilemma?
- Are IBD and carcinoma two ends of a spectrum?

THANK YOU