

1] What is the most likely diagnosis?

- Colon cancer

↳ Because of +ve family history

↳ cancer because of symptoms of anemia & normal OGD, "Iron deficiency anaemia"

2] What further investigations are required?

- 1- CBC  
↳ To detect type of anemia
- 2- Serum ferritin
- 3- Urine analysis for hematuria
- 4- Screen for coeliac disease → Through ~~upper~~ lower endoscopy
- 5- OGD & colonoscopy should be performed to exclude malignancy
- 6- CT abdomen, chest & pelvis "To detect any mass & mets"
- 7- LFT
- 8- Carcinoembryonic antigen (CEA) Tumor marker level.
- 9- colonoscopy

3) What is the appropriate treatment?

- In the absence of metastatic disease, the patient should undergo hemicolectomy of ~~the~~ the affected side.

Adjuvant chemotherapy may be required, depending on the depth of resected tumor & involvement of local LN.

- Palliative resection should be considered in patient of metastatic disease present with anaemia or obstruction.

1] What is the DID?

1. Infectious diarrhea
2. Inflammatory bowel disease
3. Diverticulitis
4. Colorectal cancer

2] What are the investigations required?

1. CBC
2. CT-scan
3. Colonoscopy
4. Barium enema
5. fecal occult blood test

3] What is the appropriate action?

- Treat the diarrhea
- Treatment of colon cancer → early stage: Surgical resection
  - LNSpread → chemotherapy
  - Mets → chemotherapy
  - Surgery

## # Colon cancer

↳ The most common cancer of GIT

↳ Major cause of death around the world

# The large intestine is found in the abdominal cavity, which can be thought of as having 2 spaces →

### 1. The IntraPeritoneal Space :

- contain 1st part of duodenum, small intestine, transverse colon, sigmoid colon & the rectum.

### 2. The Retroperitoneal Space :

- contain distal duodenum, Ascending colon, Descending colon, & Anal canal.

# Most of colorectal carcinoma are adenocarcinoma, meaning that they arise from the cells lining the intestinal gland.

Cells divide faster than usual → Polyp → Adenocarcinoma  
Premalignant

Adenomatous

↳ due to APC mutation

↳ cells look normal

Serrated

↳ mutation in DNA repair genes

↳ Have Saw-Tooth appearance

## # Stages of Colon Cancer → "Dukes' Staging"

- Stage A → carcinoma not breaching the muscularis propria
- Stage B → carcinoma breaching the muscularis propria but involvement local LN
- Stage C → carcinoma involving local LN
- Stage D → carcinoma with distal metastasis

\* 5 year survival 90% - 70% & 30% for stage A, B, C.

- The most common metastasis of colon ca → liver
- The most common metastasis of rectum cancer → lungs

## # Risk factors →

1. Non-modifiable: - Being Elderly & Male  
- IBD

2. Modifiable → - Smoking  
- eating of lot red meat  
- No fiber eating  
- Obesity

- Disorders associated with colon cancer → - familial adenomatous polyposis  
- Hereditary non-polyposis

## # Symptoms →

### - Cancer of Ascending Colon →

- The tumor Grew ~~by~~ beyond mucosa → Vague abdominal pain  
- Weight loss

- No bowel obstruction → late diagnosis

- Can ulcerate & bleed → Iron deficiency anaemia

### - Cancer of Descending Colon →

- Infiltrating masses → Ring shape mass involve the whole circumference of colon

↓  
lumen narrow

↓  
bowel obstruction

↓  
colicky pain

↓  
hematochezia

## # Diagnosis →

- colonoscopy
- fecal occult blood test
- ↑ tumor marker CEA "glycoprotein involve cell adhesion"  
↳ Non specific

- Barium enema → Apple-core sign  
↳ more in descending colon