So Far, Yet So Near

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Patient Presentation

Demographics

- 38-year-old female
- Married
- Company Accountant

Complaints

- Intermittent bloating
- Incomplete defecation
- Variable stool consistency
- Abdominal cramping

Recent Changes

- Fresh rectal bleeding after defecation× 6 months
- No tenesmus, discharge, or nocturnal symptoms
- Weight stable

Medical & Social History

Past Medical

PUD 13 years ago

Depression (no FU)

Family History

Maternal depression

Suicide attempt at 52

Social Context

2-year-old child

Family conflicts present



Initial Workup Results by Internist, 6 m ago

Laboratory

Calprotectin: **190** µg/g

FIT: **Positive**

CBC, LFTs, Iron, ESR, CRP: Normal

Colonoscopy

Erosions in the rectum and sigmoid

Pathology: Compatible with UC

Treatment

Fluoxetine 20mg, Clonazepam

Asacol 800mg TDS + suppository qhs





What would you do in your practice?

Age threshold for Colonoscopy vs Rectosigmoidoscopy?

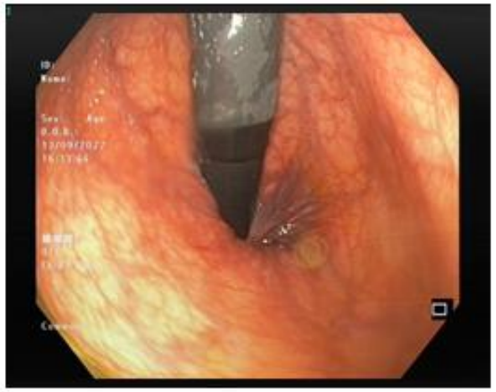
Optimal calprotectin cut-off for further evaluation?

When to initiate psychiatric consultation?

Colonoscopy Report



Rectum



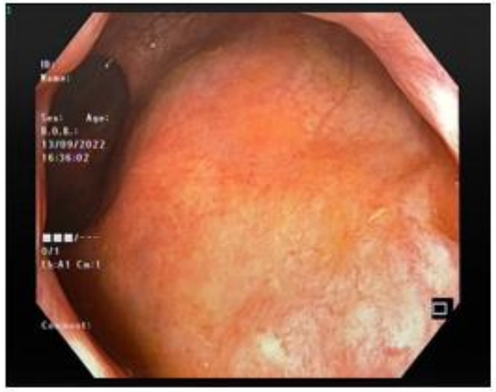
Rectum



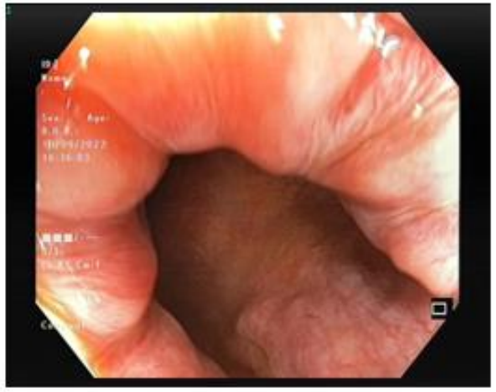
Rectum



Rectum



Rectum



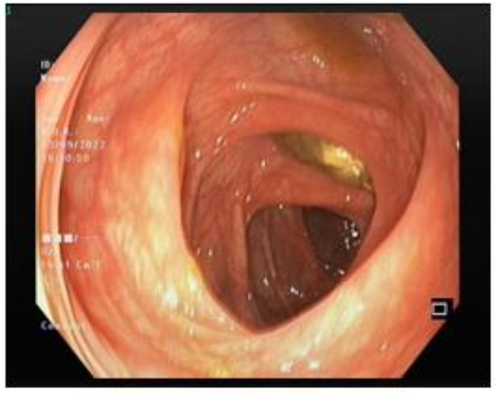
Rectum



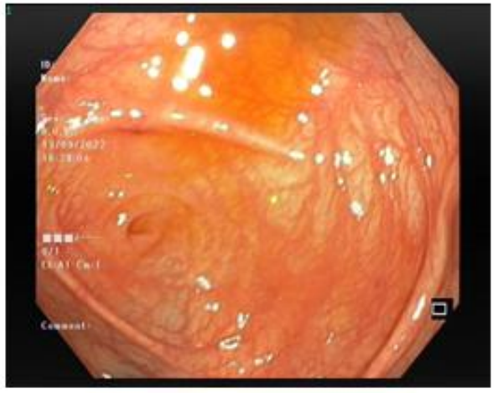
Sigmoid



Descending Colon



Transverse Colon



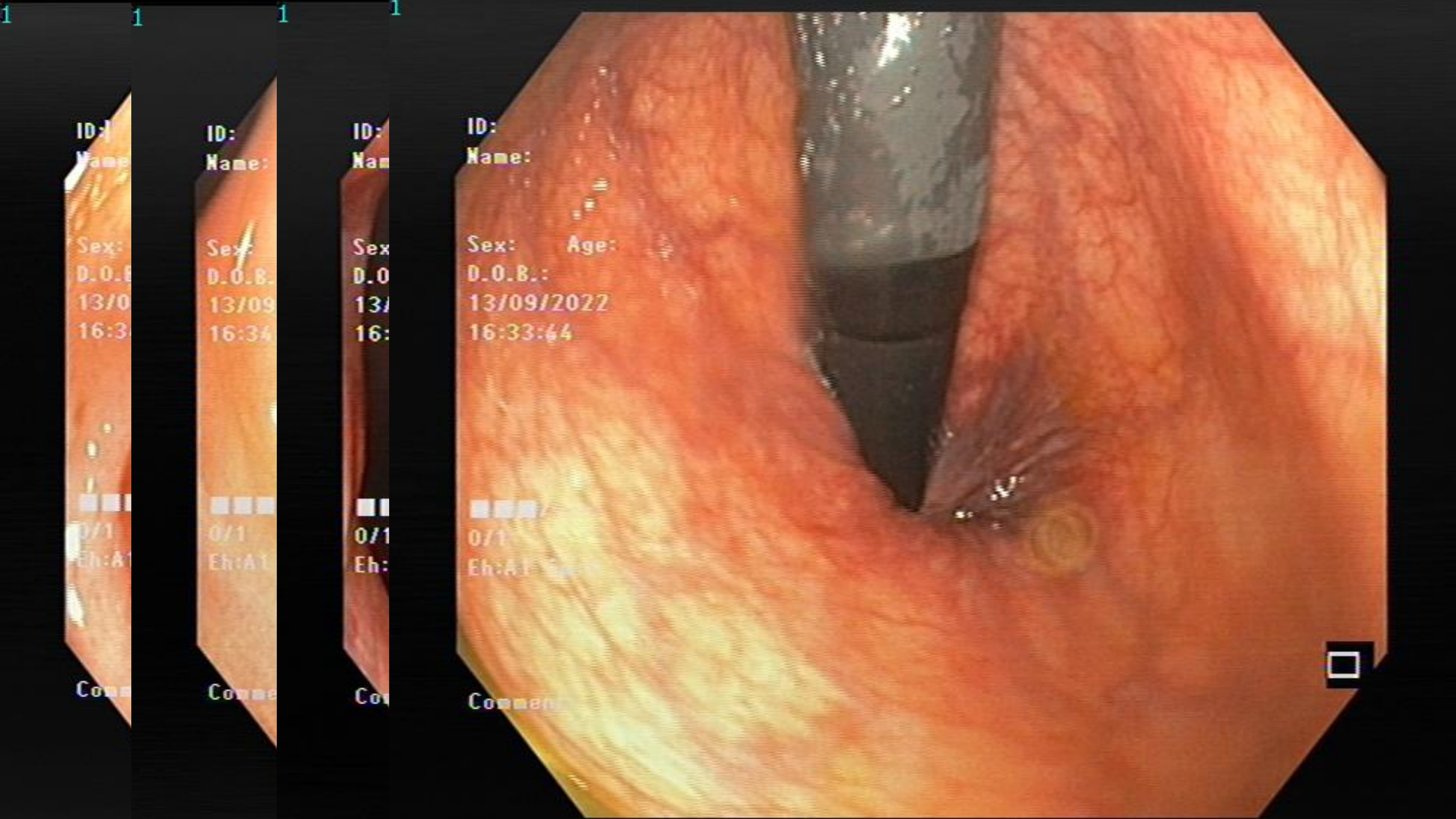
Cecum



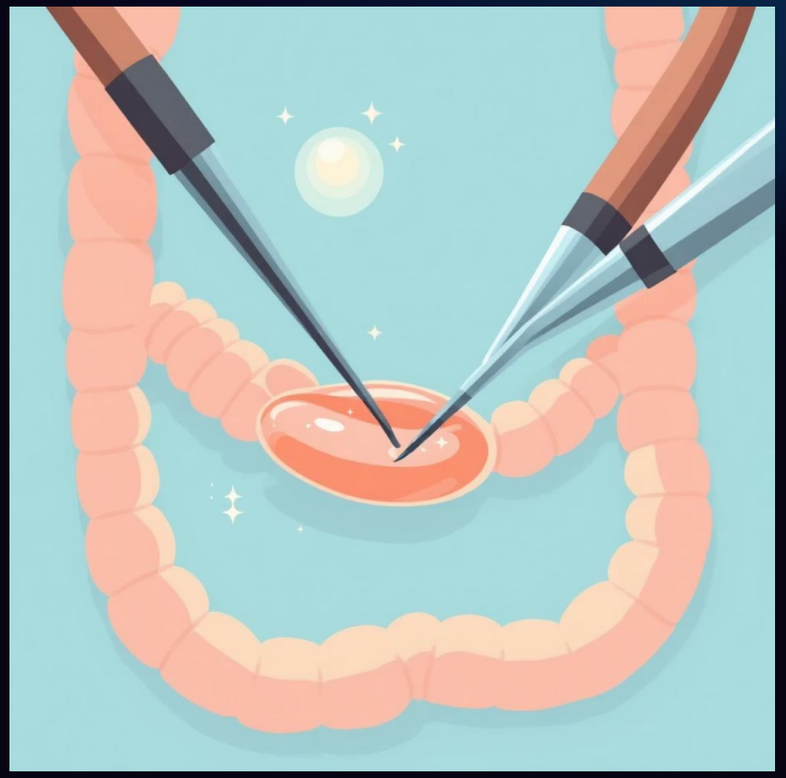
Cecum



Ileum


ID:
Name:
Sex: Age:
D.O.B.:
13/09/2022
16:33:44

Biopsy Technique Considerations



Sampling Sites

Which anatomical locations?

Samples Number

How many per site?

Forceps Size

Standard vs jumbo biopsy?

Storage Protocol

Single vs multiple bottles?

Clinical information: History of ulcerative colitis
Normal colonoscopy except for rectal erosion

Specimen: A- Ileum B- Ascending and transverse colon
C- Descending colon D- Sigmoid colon E- Rectum

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MACROSCOPIC DESCRIPTION:
Received specimen in formalin in 5 containers labeled as below:
A- Ileum: Consists of 2 pieces of soft, gray-white tissue measuring 1X0.4X0.2 cm together.
Summary of specimen: 2 /1 Embedded 100%
B- Ascending and transverse colon: Consists of multiple pieces of soft, gray-white tissue measuring 0.6X0.4X0.2 cm together.
Summary of specimen: M /1 Embedded 100%
C- Descending colon: Consists of 2 pieces of soft, gray-white tissue measuring 0.5X0.3X0.2 cm together.
Summary of specimen: 2 /1 Embedded 100%
D- Sigmoid colon: Consists of 3 pieces of soft, gray-white tissue measuring 0.7X0.3X0.2 cm together.
Summary of specimen: 3 /1 Embedded 100%
E- Rectum: Consists of 5 pieces of soft, gray-white tissue measuring 0.8X0.4X0.2 cm together.
Summary of specimen: 5 /1 Embedded 100%

MICROSCOPIC DESCRIPTION: Please see the diagnosis

DIAGNOSIS:

A- ILEUM, MUCOSAL BIOPSY:
- No significant pathologic changes

B- ASCENDING AND TRANSVERSE COLON, MUCOSAL BIOPSY:
- No significant pathologic changes

C- DESCENDING COLON, MUCOSAL BIOPSY:
- No significant pathologic changes

D- SIGMOID COLON, MUCOSAL BIOPSY:
- Mild eosinophilic infiltration with no other significant pathologic findings

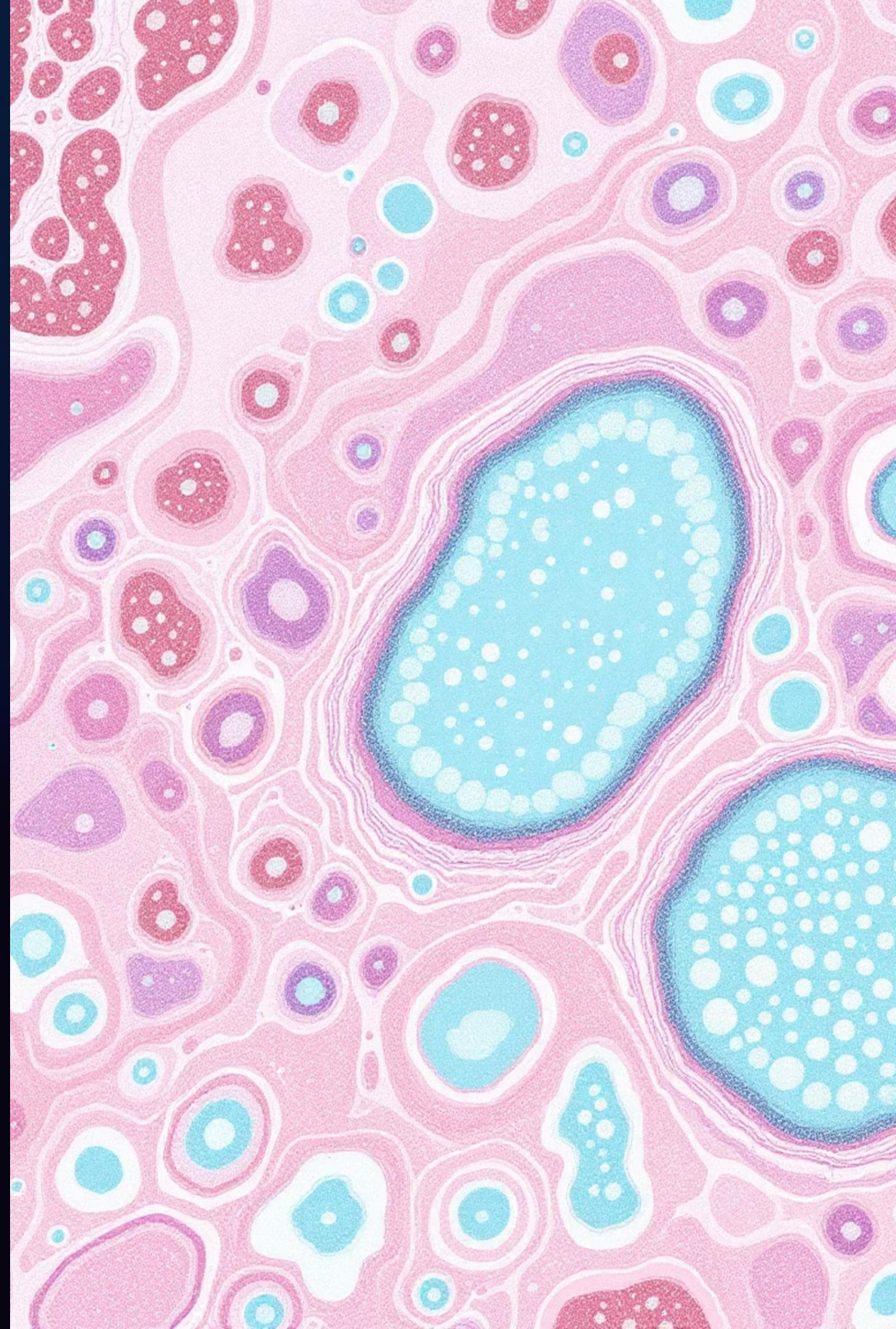
E- RECTUM, MUCOSAL BIOPSY:
- No significant pathologic changes

In your practice

Patient presents with mild eosinophilic infiltration

What is the clinical importance?

How do you approach management decisions?





Initial Laboratory Profile

Complete Blood Count

- WBC: 5,600
- Hb: 12.1 g/dL
- Platelets: 232,000

Inflammatory Markers

- ESR: 8 mm/hr
- CRP: 4 mg/L
- Calprotectin: **196 µg/g**

Iron Studies

- Ferritin: **5 ng/mL**
- Iron/TIBC: 71/290
- Vitamin D: **8 ng/mL**

Additional: FIT negative, LFT normal range, TTG Ab IgA negative

Current Management Dilemma

01
Discontinue all medications

02
Continue all current therapy

03
Continue supp, Discontinue others

04
Further imaging: CTE, MRE

05
Additional evaluation required

Current Medications

- Fluoxetine 20mg daily
- Clonazepam PRN
- Asacol 800mg TDS
- Asacol suppository QHS

Specimen: The specimen received for review and second opinion consists of two paraffin blocks labeled as P98-O-6812/A and B and a copy of corresponding pathology report from Day hospital pathology lab, Tehran.
Sections were prepared from the remaining paraffin embedded tissue and stained by HE method.
The paraffin blocks were returned to the patient.

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MICROSCOPIC DESCRIPTION:

Please see the diagnosis

SECOND LOOK DIAGNOSIS:

A- RECTUM, MUCOSAL BIOPSY:

- Active chronic inflammation with regenerative glandular changes and eosinophilic infiltration
- Neither granuloma nor dysplasia is detected
- Please see note

B- LEFT COLON, MUCOSAL BIOPSY:

- No significant pathologic changes

NOTE:

- If the lesions are diffusely involving the rectal mucosa, the major histological differential diagnoses could be inflammatory bowel disease, drug injury and prolonged enteric infections. Similar changes could develop in localized lesions such as mucosal changes secondary to fissures and solitary rectal ulcer syndrome. Correlation of clinical, histopathologic and colonoscopy findings and close follow up are mandatory to reach a conclusive diagnosis.

SECOND LOOK DIAGNOSIS:

A- RECTUM, MUCOSAL BIOPSY:

- Active chronic inflammation with regenerative glandular changes and eosinophilic infiltration
- Neither granuloma nor dysplasia is detected
- Please see note

B- LEFT COLON, MUCOSAL BIOPSY:

- No significant pathologic changes

Your recommendation?

01

Discontinue all medications

02

Continue all current therapy

03

Continue supp, Discontinue others

04

Further imaging: CTE, MRE

05

Additional evaluation required



Clinical Management

1

Psychiatric Referral

Patient referred for comprehensive mental health evaluation

2

Medication Adjustment

Oral Asacol discontinued

Continued: Fluoxetine 20mg, Clonazepam, Asacol suppository QHS

3

Follow-up Schedule

Next visit planned for 6 months

6-Month Follow-up Assessment

Symptoms:

- Mild bloating
- Incomplete evacuation
- 1-2 semi-formed, non-bloody stools

Compliance:

- Intermittent suppository use (2-3 missed doses weekly)
- Psychiatric follow-up: None

WBC/Hb/PLT: 6500/**11.5**/180000
LFT: N
ESR: **35**, CRP: 9

Fit: **+**
Ferritin: **5**
Calprotectin: **240**



Patient Education & Next Steps

Medication Adherence

Emphasized critical importance of consistent suppository use

Psychiatric Care

Reinforced need for psychiatric consultation and follow-up

Continued Monitoring

Follow-up appointment scheduled for 6 months

Clinical Presentation After 6 Months

Symptoms

- Severe tenesmus
- 3-4 loose bloody stools daily
- Nocturnal defecation
- Lower abdominal cramps
- Weakness, bloating

Laboratory Results

- WBC/Hb/PLT: 7200/**9.5**/260000
- Ferritin: **2**
- Calprotectin: **310**
- Fit: **+**
- LFT: N
- ESR: **15** CRP: **25**
- C-diff toxin: -



⊗ Patient discontinued suppositories 2 months prior

No psychiatric follow-up

What do you do?

1

Conservative Approach

Add Asacol 2.4g PO + suppositories BID

2

Aggressive Management

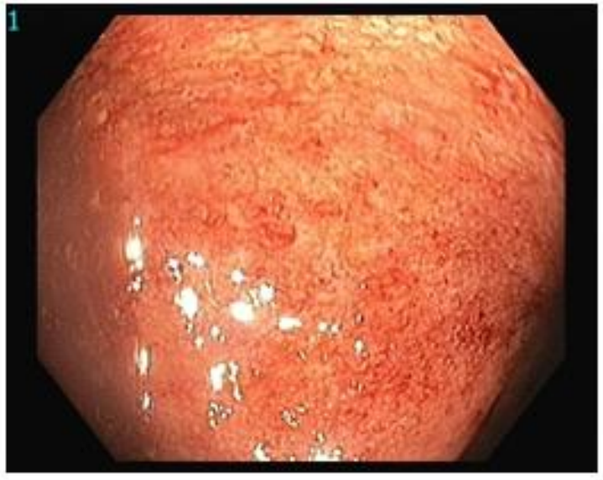
Prednisolone 50mg + AZA + Asacol oral + suppositories

3

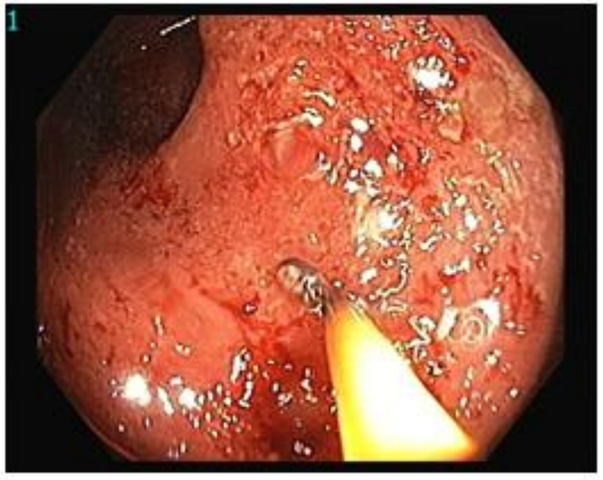
Diagnostic Assessment

Colonoscopy evaluation

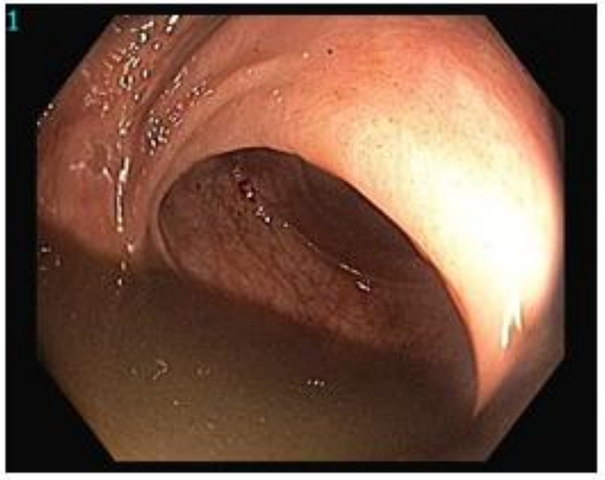
Colonoscopy Report



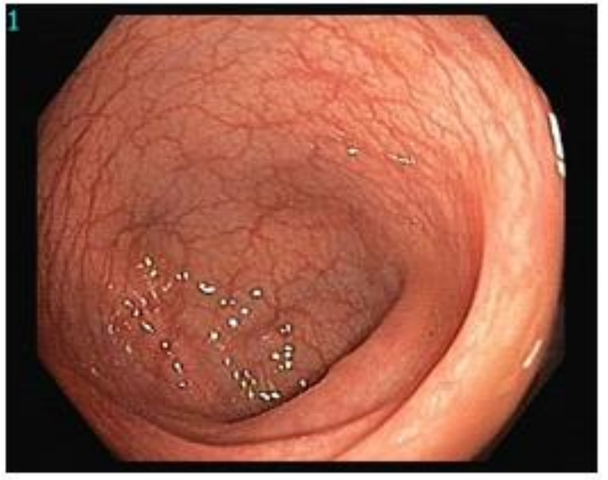
Rectum



Rectum



Sigmoid



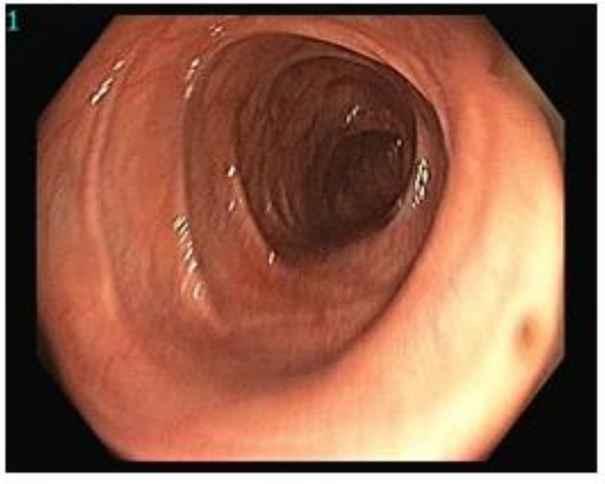
Sigmoid



Descending Colon



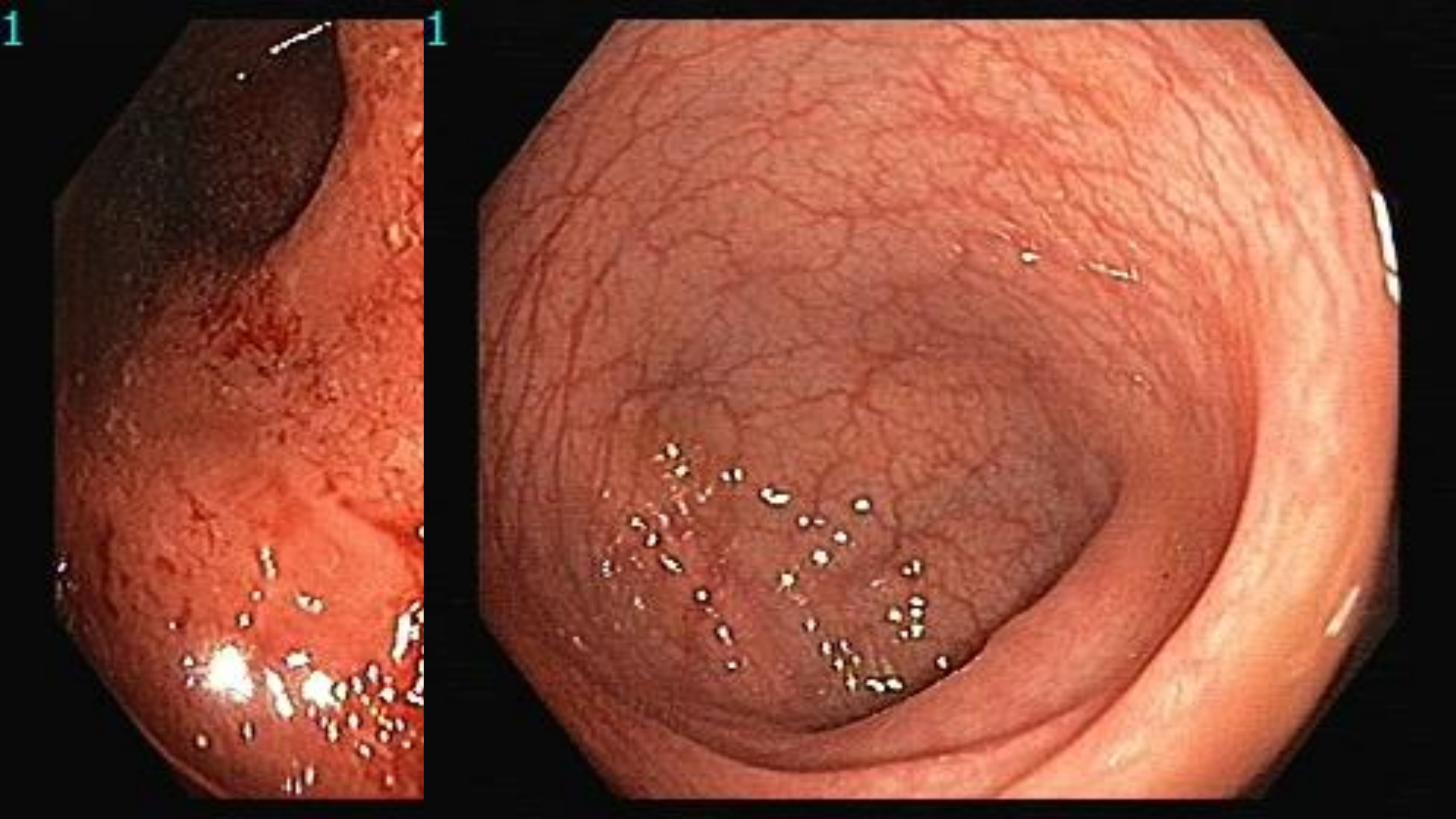
Splenic Flexure



Transverse Colon



Ileum


1
1

DIAGNOSIS:

A-ILEUM, MUCOSAL BIOPSY:

- No significant pathologic changes

B-ASCENDING COLON, MUCOSAL BIOPSY:

- No significant pathologic changes
- No dysplasia is present

C-TRANSVERSE COLON, MUCOSAL BIOPSY:

- No significant pathologic changes
- No dysplasia is present

D-DESCENDING COLON, MUCOSAL BIOPSY:

- No significant pathologic changes
- No dysplasia is present

E-SIGMOID COLON, MUCOSAL BIOPSY:

- Melanosis coli with no other significant histological changes
- No dysplasia is present

F-RECTUM, MUCOSAL BIOPSY:

- Active lesions of ulcerative colitis
- No CMV cytopathic changes detected (Confirmed by IHC staining)
- No dysplasia is present

MARKERS	RESULTS
CMV (Block F):	Negative

** External positive control: showed appropriate positive nuclear reaction in CMV infected cells*

INTERPRETATION

No CMV antigen detected by IHC staining



Treatment Options

1. **Asacol suppositories 1g BID**
   Standard topical therapy approach
2. **Asacol suppositories 500mg BID**
   Reduced-dose topical maintenance
3. **Add oral Asacol 1600mg BID**
   Combined systemic therapy
4. **Prednisolone + Azathioprine**
   Immunosuppressive escalation
5. **VedAryo 300 mg**
   Aggressive therapy

Recommended Management Strategy

01

Medication Compliance

Emphasize importance of suppository adherence

02

Psychiatric Consultation

Address underlying mental health barriers

03

Treatment Plan

Asacol suppositories 500mg BID + psychiatric follow-up

04

Follow-up Schedule

Re-evaluation in 6 months

Clinical Course: 2-Year Follow-up

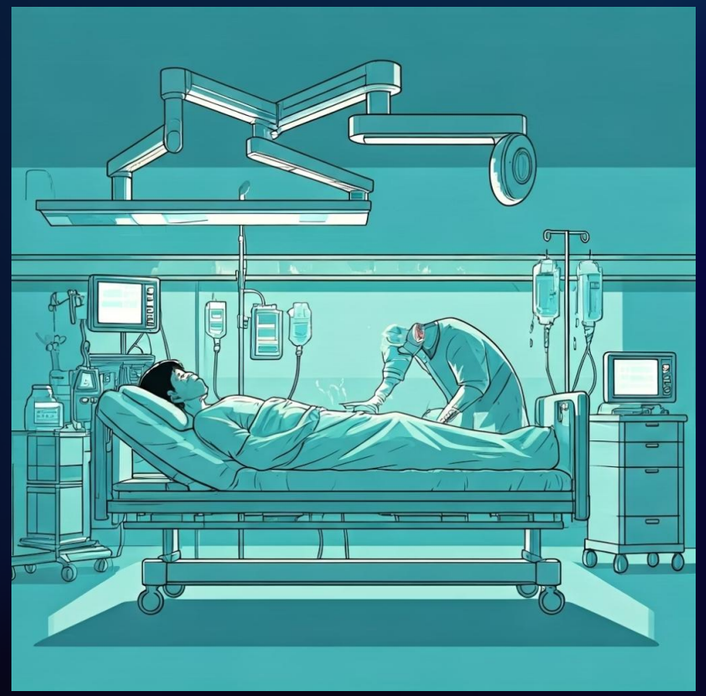
Severe Relapse Presentation

Symptoms

- 16 loose bloody stools daily
- Nocturnal symptoms
- Severe tenesmus
- Abdominal pain, weight loss

Physical Examination

- Pale mucosa, temporal wasting
- Digital clubbing
- Diffuse abdominal tenderness
- HR: 130 bpm, BP: 104/78



Critical factors:

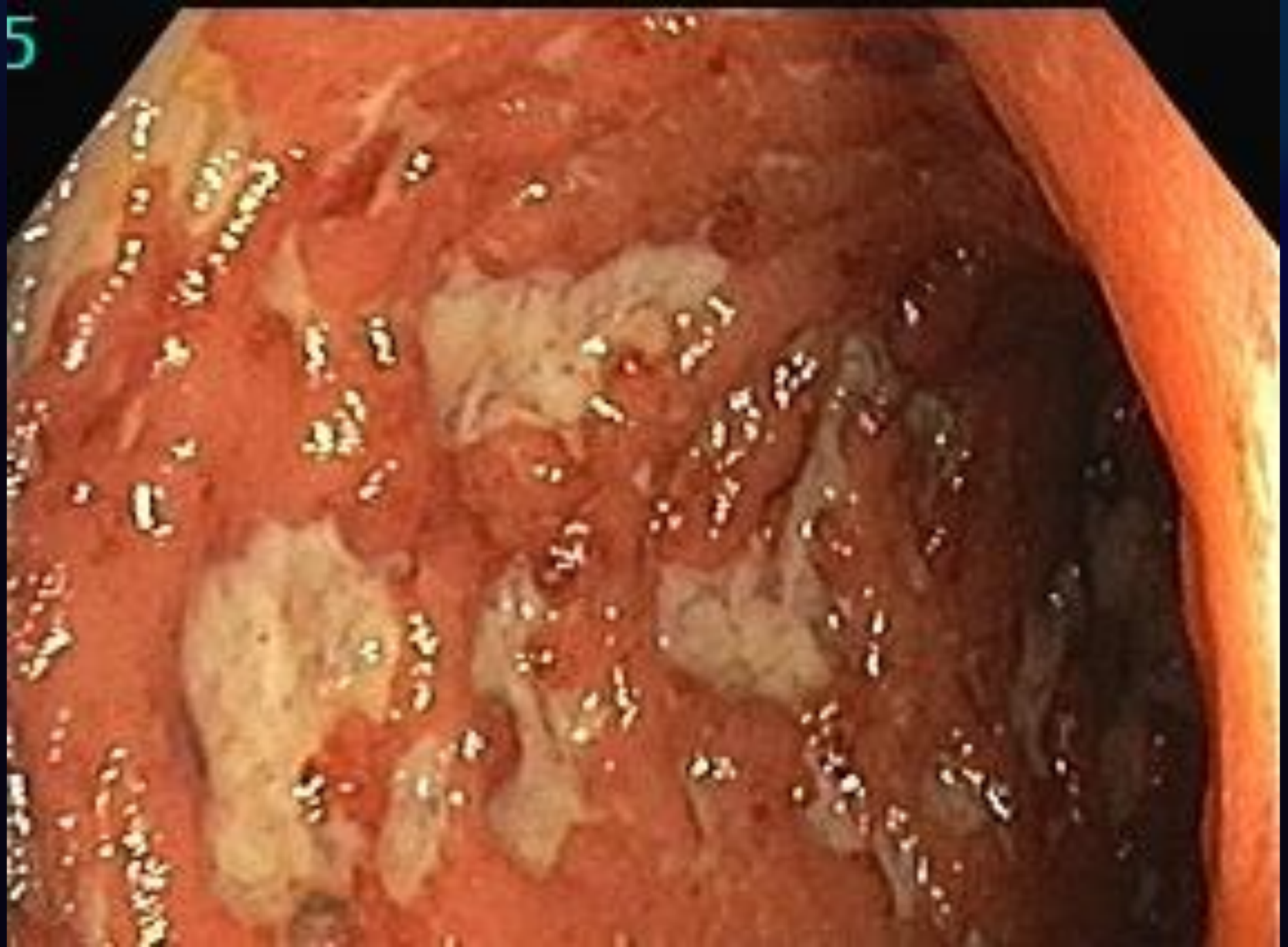
⊗ All medications discontinued from 1 year

No psychiatric follow-up



Laboratory Findings

WBC/Hb/PLT: 13200/**6.9**/720000
Ferritin: **10**
Calprotectin: **423**
Fit: **+**
LFT: N
Vit D: -
ESR: **68**
CRP: **210**
PPD: **Pending**
IGRA: -
Viral: -
C-Diff toxin: **pending**



Initial Management Decision Points

Admission Status
Inpatient versus outpatient management?

Iron Replacement
PO versus IV iron supplementation?

Steroid Therapy
Initiate corticosteroid treatment?

Antimicrobial Coverage
Empiric antibiotic therapy indicated?

Antiviral Consideration
Empiric ganciclovir for CMV?

C. diff Treatment
Empiric C-diff coverage?

Anticoagulation
Enoxaparin versus heparin?

Surgical Consultation
Early surgery team involvement?



Induction of remission options

5-ASA Therapy

Suppository formulation

High-dose oral (4g daily)

Novel Agents

Rhofanib | VedAryo

Nupada | Stelara

Eldixia



Immunomodulators

Azathioprine (AZA)

6-Mercaptopurine (6MP)

Anti-TNF Biologics

Infliximab (Remicade)

CinnoRA

Treatment selection based on disease severity, patient factors, and response patterns



Implemented Treatment Regimen

Corticosteroid

Hydrocortisone 100mg TID

Antiviral Therapy

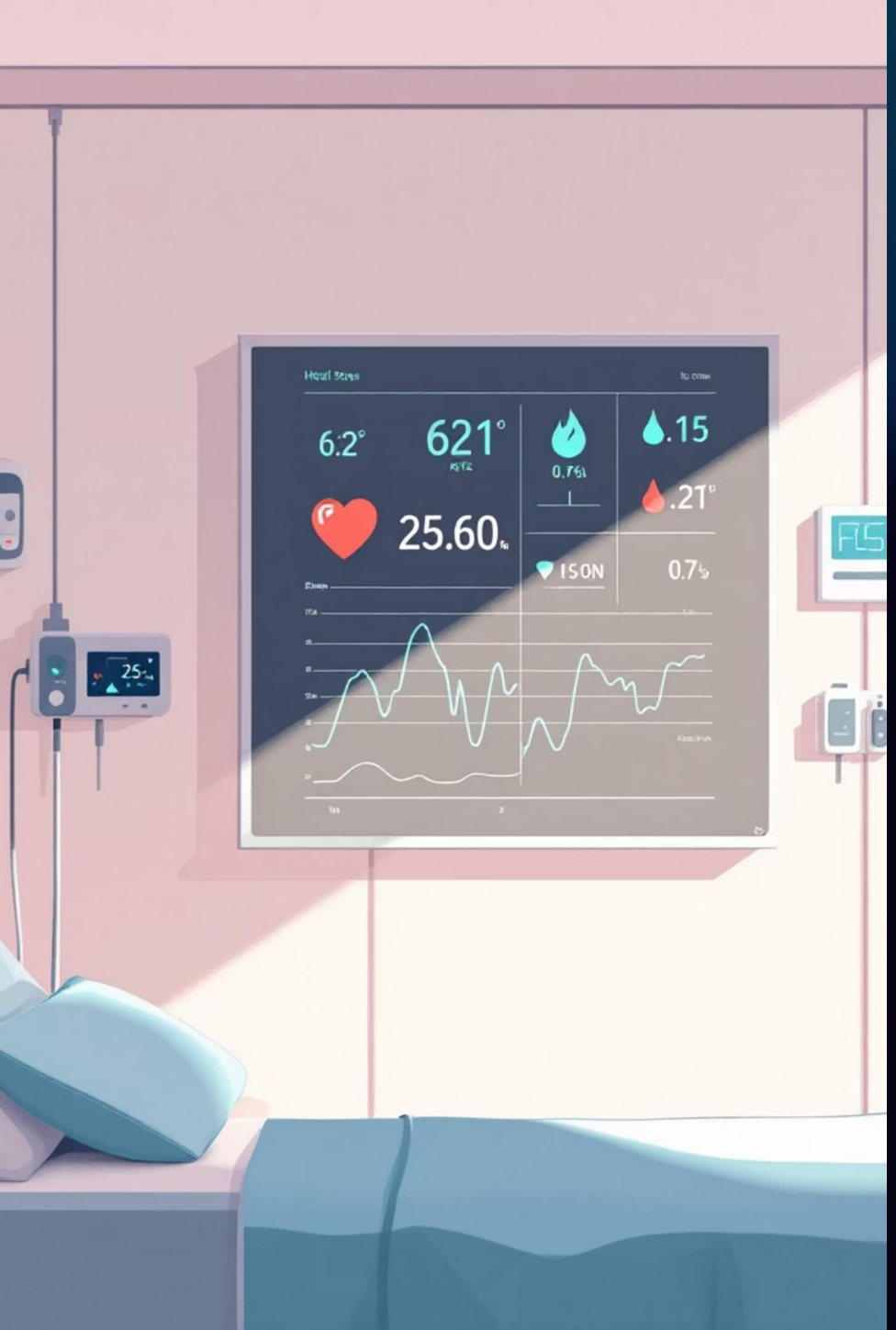
Ganciclovir 400mg Q12H

Biologic Therapy

Infliximab 400mg

Supportive Care

- **Enoxaparin 40mg daily** - VTE prophylaxis
- **Ringer's 4L daily** - Fluid resuscitation
- **PRBC 2 units** - Anemia correction



After 2 days

WBC/Hb/PLT: 11300/9.7/650000
ESR: 68 → 59
CRP: **210 →160**

3-4 bloody stool, Severe tenesmus, Bloating
without abdominal pain or fever

Mild abdominal tenderness
BP: 110/80
HR: 96

Management Crossroads

1

Continue Current Treatment

Maintain inpatient regimen

Monitor response progression

2

Transition to Outpatient

Prednisolone 50mg daily

Valganciclovir oral therapy

Follow-up in 1 week

3

Surgical Consultation

Evaluate for operative intervention

Assess colectomy candidacy



Day 4: Clinical Deterioration

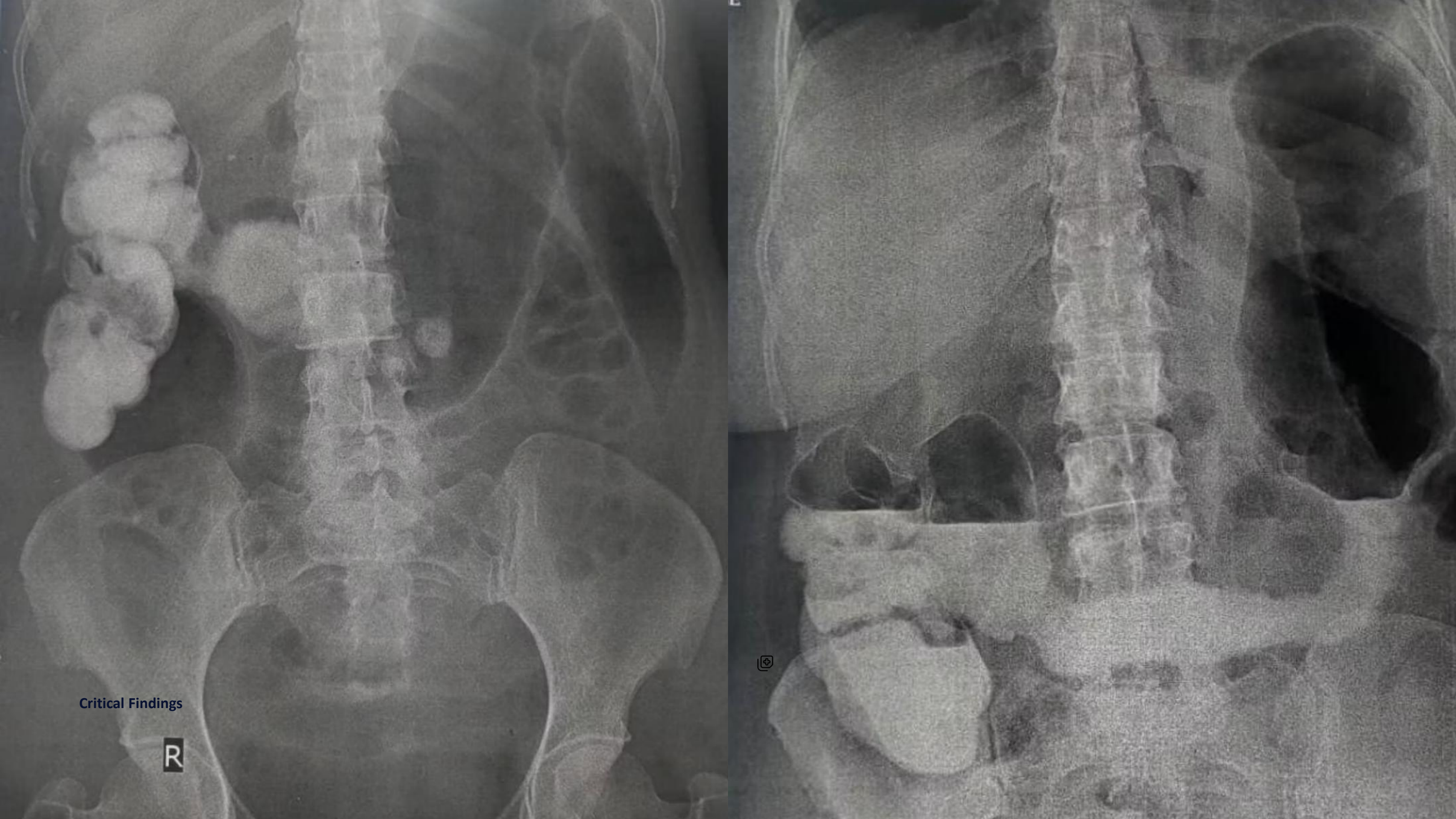
WBC/Hb/PLT: 9600/10/590000
ESR: **59 → 52**
CRP: **160 → 132**

No defecation from 2 days ago,
Severe tenesmus, severe bloating, and abdominal pain, Without fever

Severe abdominal distension, LLQ pain

BP: 106/78
HR: 102





Critical Findings



Your Recommendations?

- **Continue Current**

  Remicade, Ganciclovir, Hydrocortisone

- **Add Antibiotics**

  Cipro & Metro

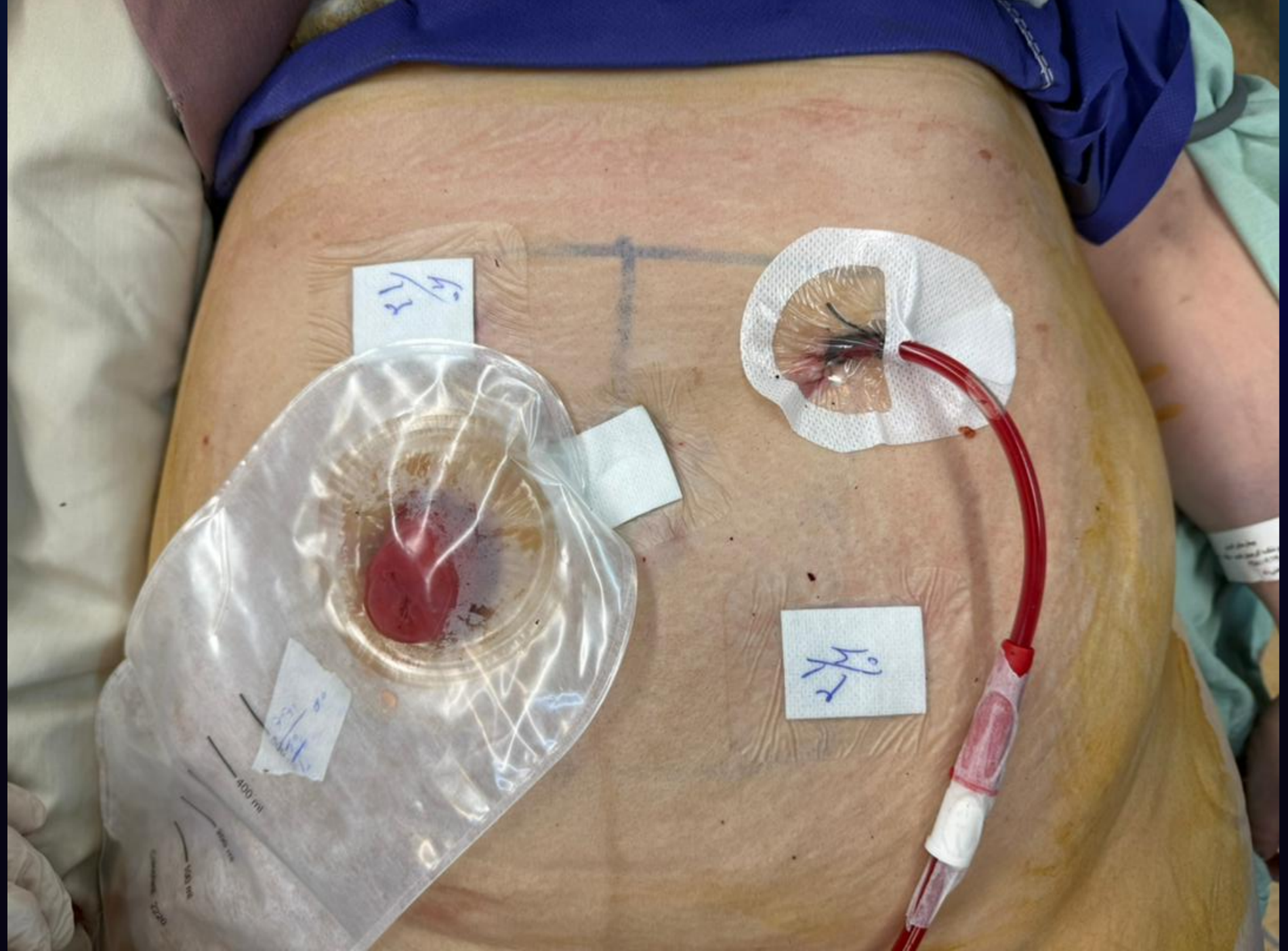
- **Procedure**

  Colonoscopy for decompression

- **Surgery consultation**







DIAGNOSIS:

A- ILEUM, MUCOSAL BIOPSY:
- No significant pathologic changes

B- ASCENDING COLON, MUCOSAL BIOPSY:
- Chronic crypt destructive colitis, quiescent
- Neither granuloma nor dysplasia seen
- No CMV cytopathic effect is present

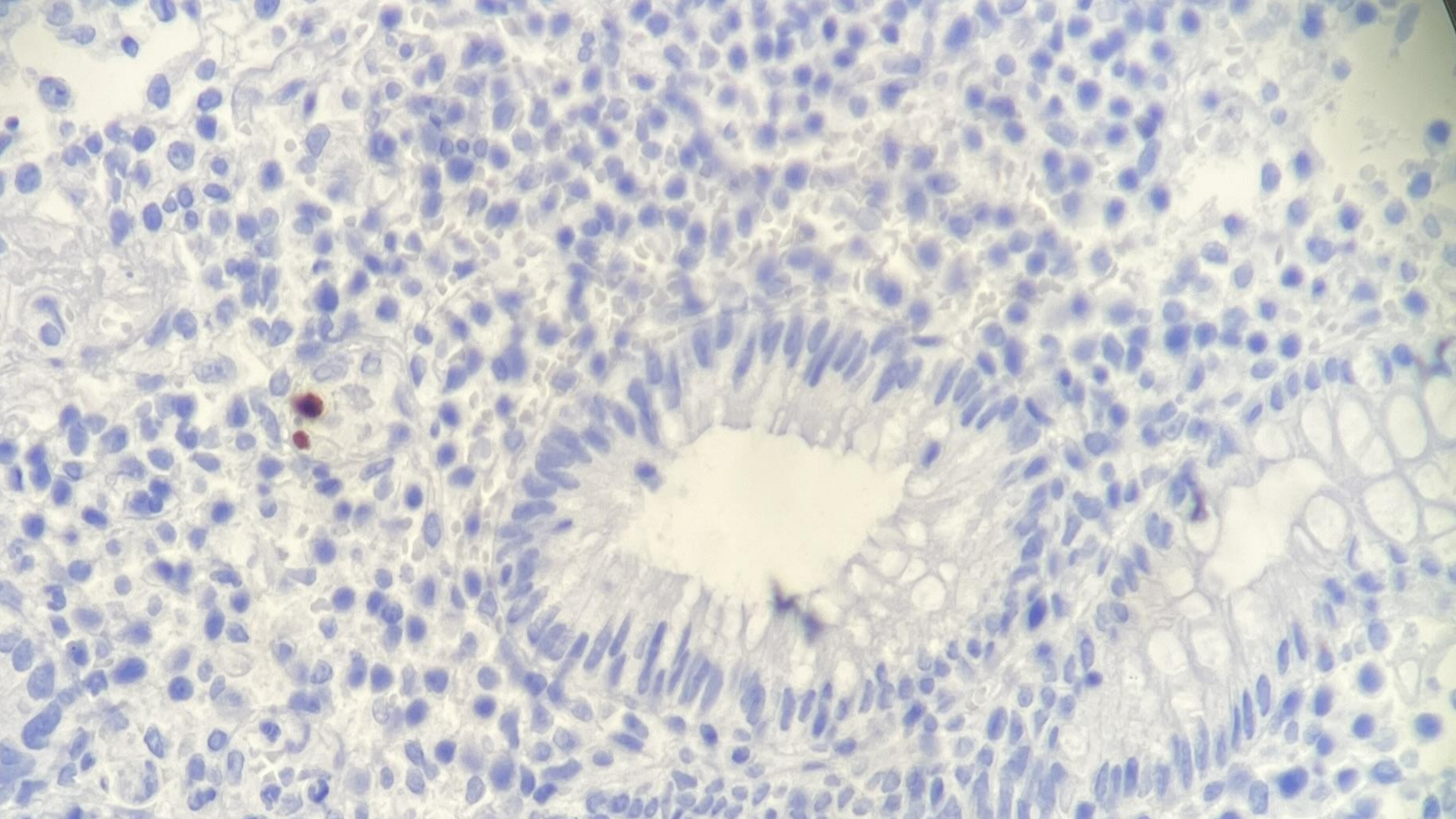
C- TRANSVERSE COLON, MUCOSAL BIOPSY:
- Chronic crypt destructive colitis, active with ulceration
- Neither granuloma nor dysplasia seen
- No CMV cytopathic effect is present

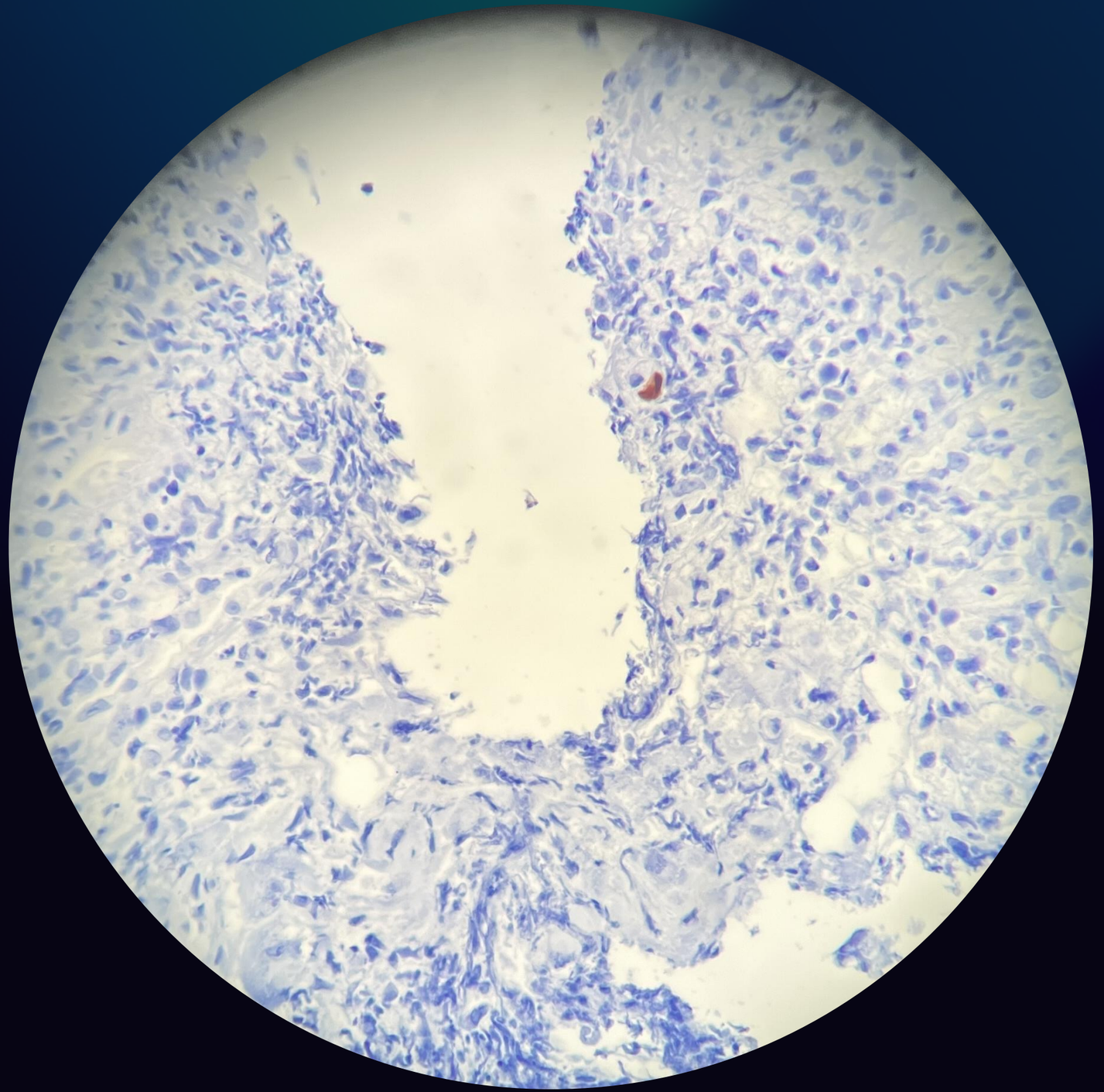
D- DESCENDING COLON, MUCOSAL BIOPSY:
- Chronic crypt destructive colitis, active with ulceration
- Neither granuloma nor dysplasia seen
- Rare CMV antigen was detected by IHC, see note please

E- SIGMOID COLON, MUCOSAL BIOPSY:
- Chronic crypt destructive colitis, active with ulceration
- Neither granuloma nor dysplasia seen
- Rare CMV antigen was detected by IHC, see note please

F- RECTUM, MUCOSAL BIOPSY:
- Mild irregularity in contour and distribution of colonic glands with no other significant pathologic findings

NOTE:
Considering the patient's clinical background the above histologic findings are compatible with relapse of chronic inflammatory bowel disease





MARKERS	RESULTS
1 – CMV (Block C)	Negative
2 – CMV (Block D)	Rare endothelial cell nuclei is positive for CMV antigen
3 – CMV (Block E)	Two endothelial cell nuclei are positive for CMV antigen

INTERPRETATION

CMV antigen detected in specimen D & E

NOTE:

- External positive control: showed appropriate positive nuclear reaction in CMV infected cells

"It is the time you have wasted for your rose that makes your rose so important."

Patient care requires dedication, time, and thoughtful consideration

