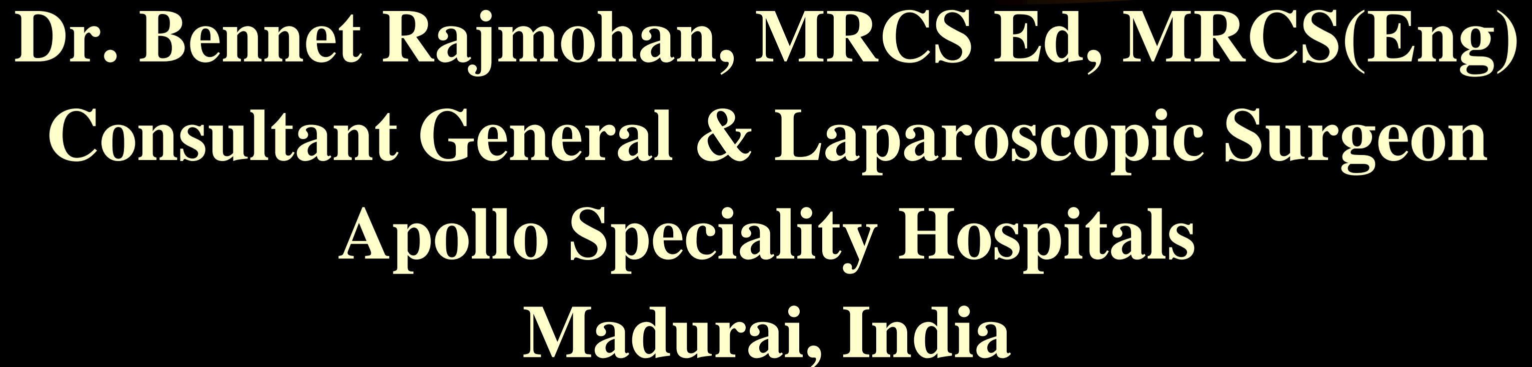
An unusual presentation of Severe Ulcerative Proctocolitis



Dr. Bennet Rajmohan, MRCS Ed, MRCS(Eng)
Consultant General & Laparoscopic Surgeon
Apollo Speciality Hospitals
Madurai, India

Introduction

- Ulcerative colitis is a debilitating disease
- Initial episode limited to
  - rectum / distal colon – 1/3rd of patients
  - left colon up to splenic flexure – 1/3rd
  - Beyond splenic flexure (pancolitis) – 1/3rd
    - < 10 % fulminant disease.

History

- 75 years, lady, Emergency admission
- Chief complaints :
  - Diarrhoea x 2 wks, on & off – many years
  - Blood in stools x 1 week
  - Abdominal pain x 2 days
- History of Present Illness :
  - > 10 loose stools / day
  - Fresh blood in stools. No mucus
  - Reduced mobility – bedbound
  - Severe abdominal cramps – no fever / vomiting

- Past History :
  - No h/o DM / HT / IHD
  - No previous surgery
- Drug History : Tab. Eltroxin > 2years
- Family History : Nil significant
- Allergies : Nil

Examination

- O/E : Elderly lady, in distress, Pale
  HR – 100/min, BP 100/70 mmHg
  RR – 24/min, O_2 sat – 100% (room air)
- Systems :
  CVS ⎤ Normal
  RS ⎦
- Abdomen : tenderness in right iliac fossa
- Clinical impression : Acute gastroenteritis
  – Admitted under Physicians

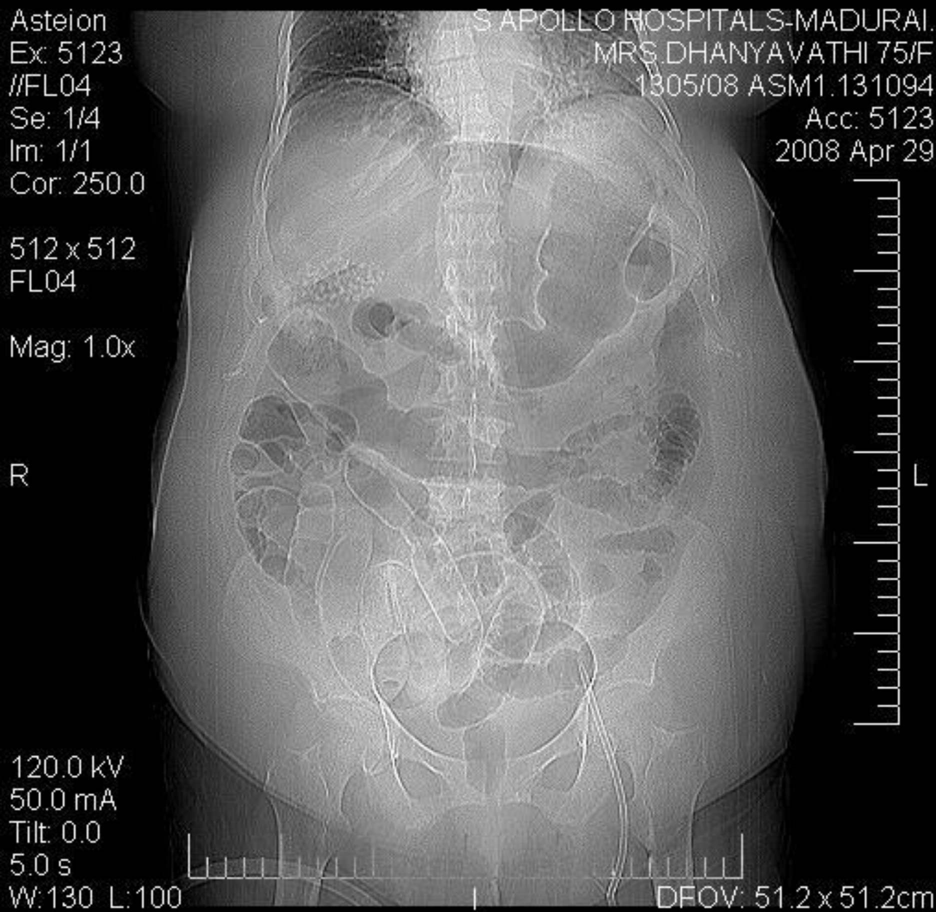
Investigations

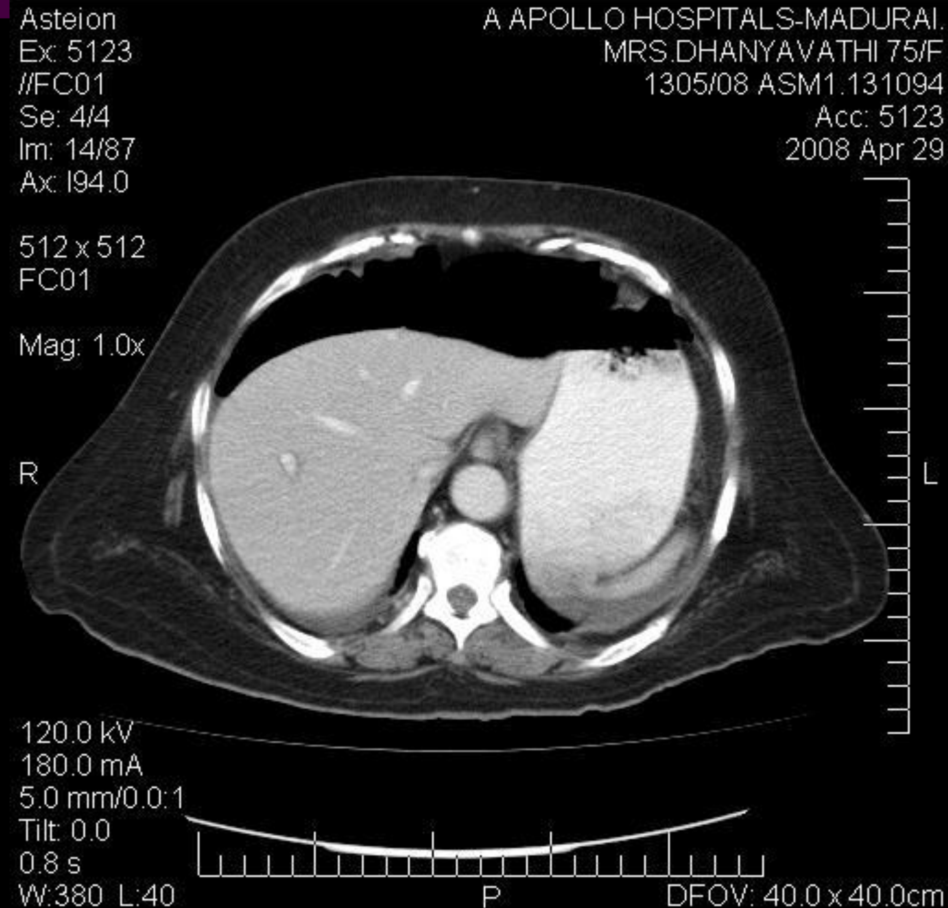
- **Hb – 7.6 gm%**
- WBC – 7700 / mm^3
- **ESR – 78 mm (1 hr)**
- Urea – 125 mg / dL
- **Creatinine – 6.2 mg / dL**
- Albumin – 2.2 gm%
- Stool routine ⎤ Normal
- Urine routine ⎦
- U/S abd – Significant intraabdominal gas

Opinions

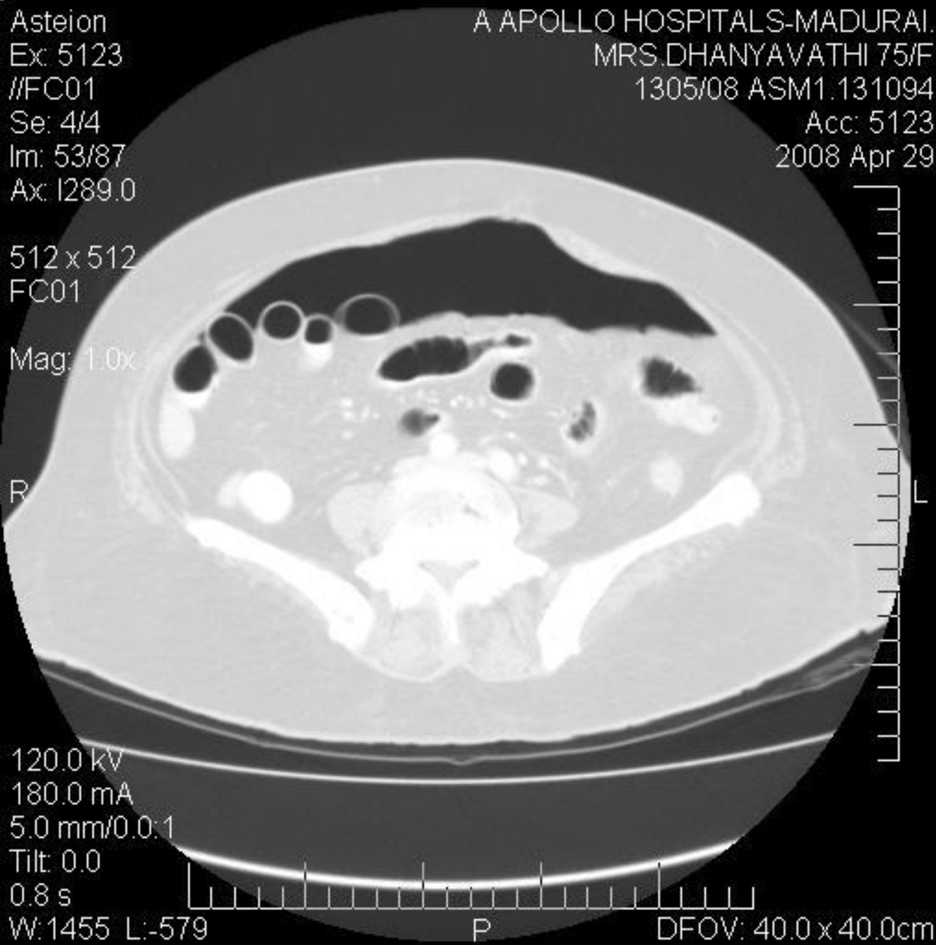
- Nephrology opinion – ARF / Peritonitis
  - Advised Dialysis & CT abdomen
- Surgery opinion
  - Generalised abdominal tenderness, rebound → Perforative Peritonitis
  - Advised Emergency Laparotomy – very high risk
- ABG – severe metabolic acidosis

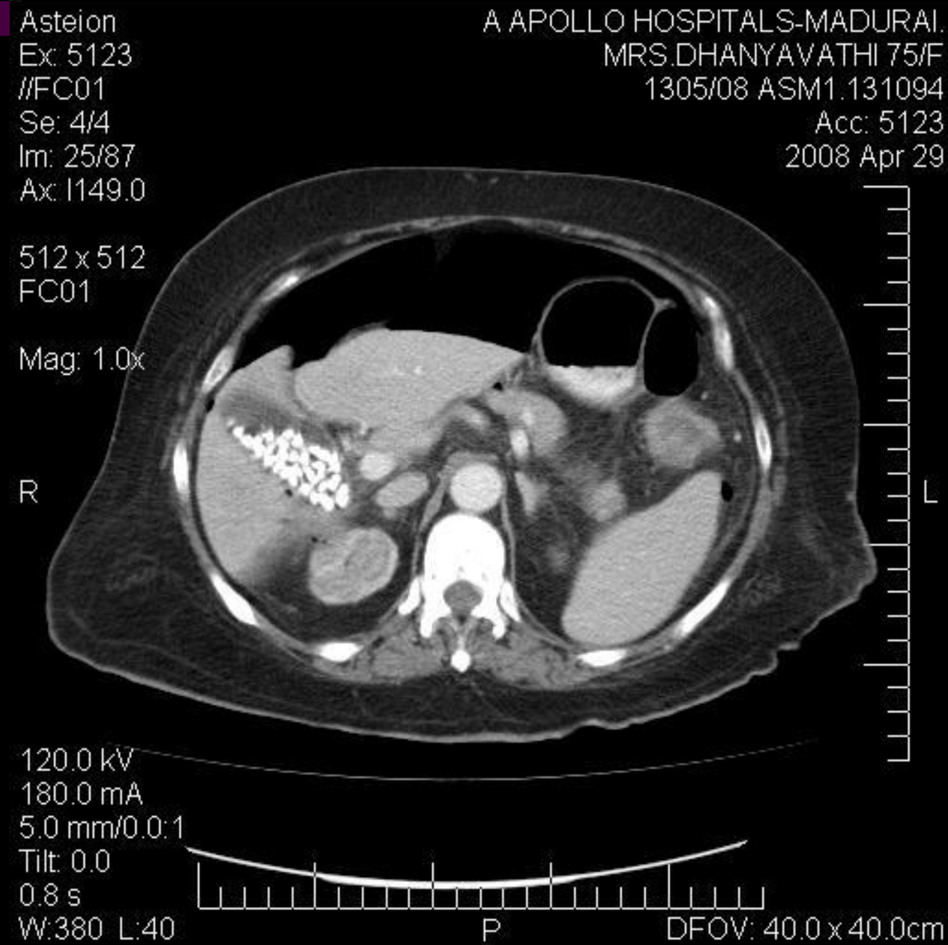
CT abdomen



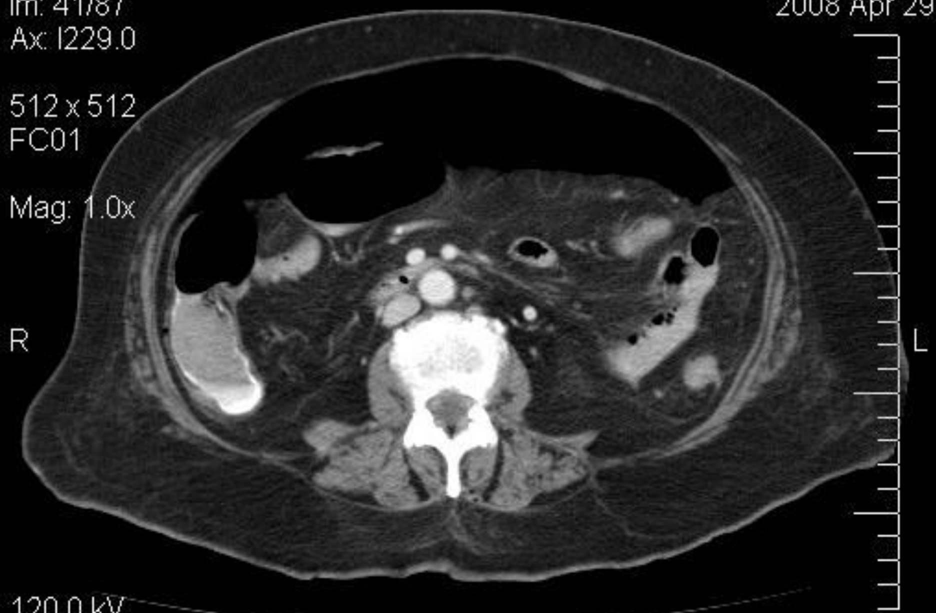


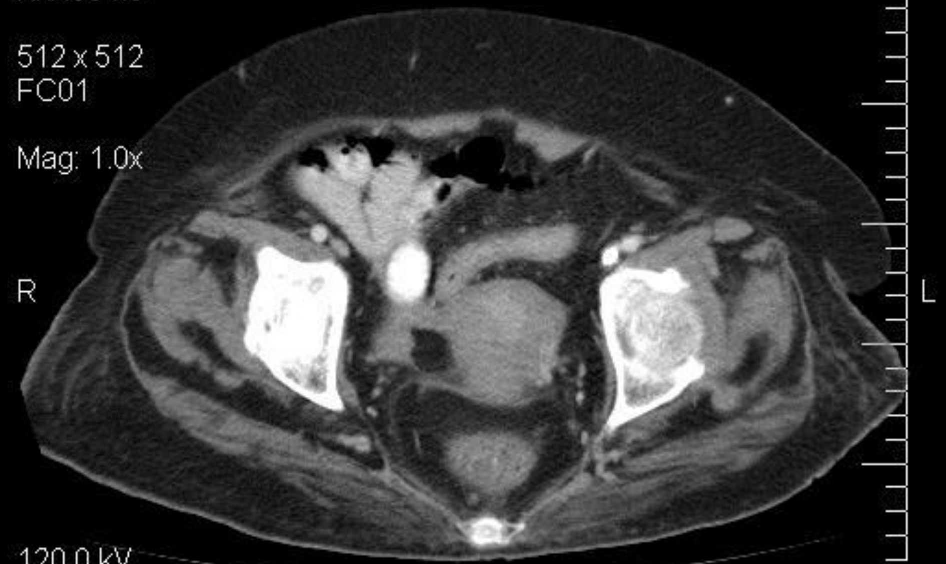
CT abdomen





CT abdomen





Immediate Treatment

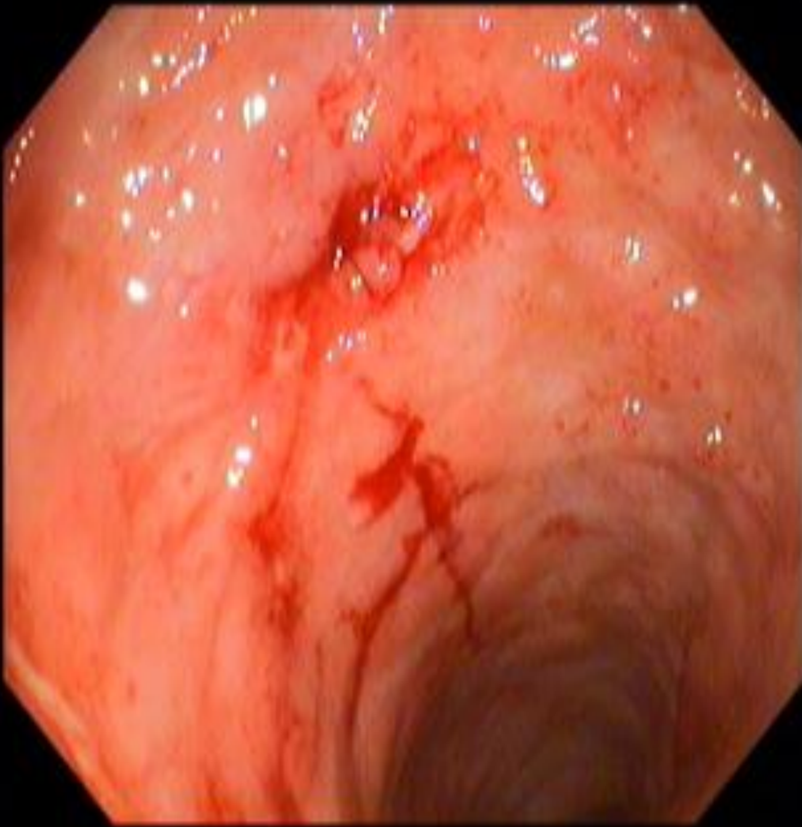
- Shifted to ICU
- Relatives (including 2 surgeons) refused Surgery → Bilateral flank drains inserted under IV sedation
- Dialysis
- IV broad spectrum antibiotics / FFPs / PCs

- Improved & shifted out of ICU by 5th day
- Blood & mucous diarrhoea persisted

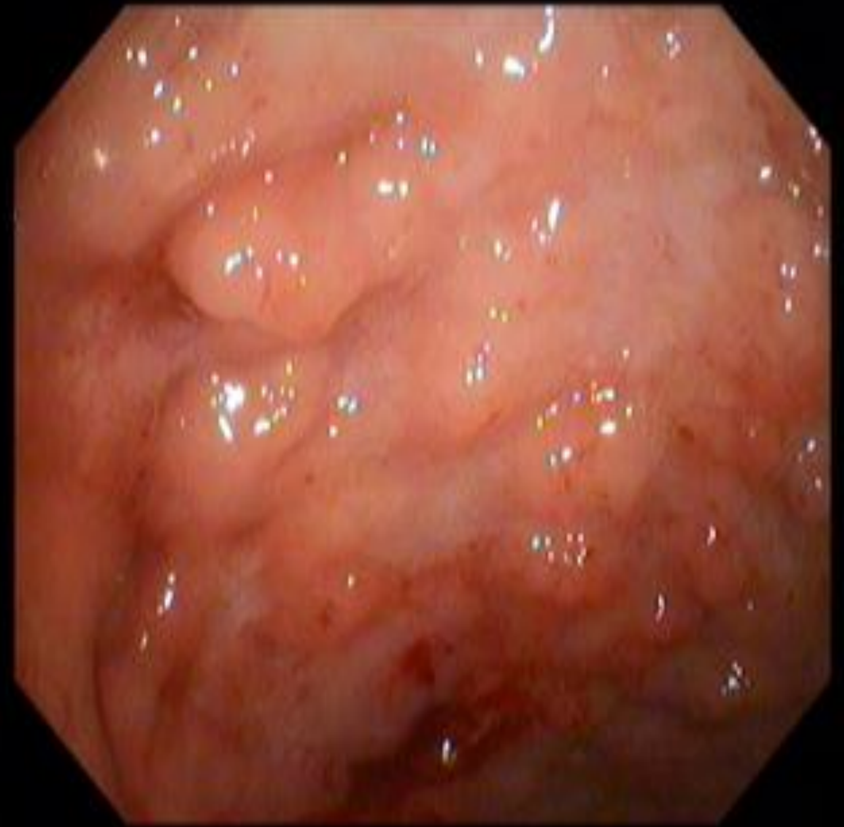
Further investigations

- Stool culture – no growth
- OGD – normal
- Colonoscopy after bowel prep
  - Severe proctocolitis, extending continuously at least upto mid-transverse colon, pseudopolyps → pancolitis
  - Probable site of perforation in sigmoid

Colonoscopy

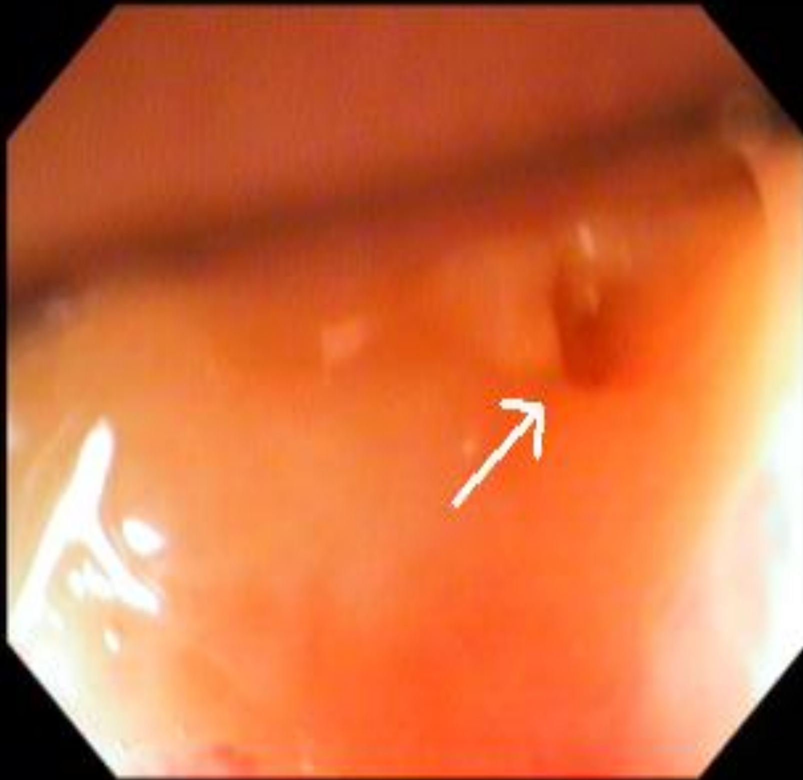


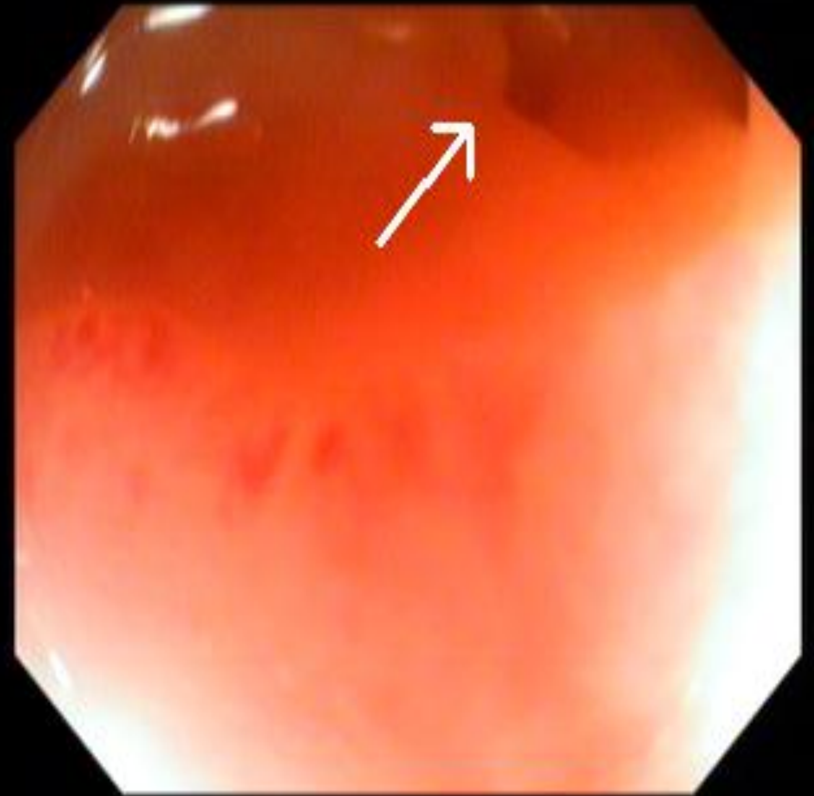
Rectum



Pseudopolyps

Colonoscopy





Probable site of perforation – sigmoid

Definitive Treatment

- Oral Mesalazine 800mg tds
- Budesonide enemas bd
- Oral Budesonide tds
- Antispasmodics / Anti-diarrhoeals / antibiotics

- Stool frequency 3 – 4 / day
- Creatinine 1.7 mg%
- Flank drains removed
- Bipsy result – Nonspecific colitis

Ulcerative colitis

- Recurring episodes of inflammation limited to colonic mucosa
- Invariably involves rectum
- May extend in a proximal and continuous fashion to involve rest of the colon

- Age 15 – 40 yrs, 50 – 80 yrs
- Equal in both sexes
- Smoking – 40% less risk
- Etiology not well understood – dysregulation of mucosal immune system

Severity classification

- Truelove and Witts (1950s) – modified classification
- Mild, moderate or severe
- Symptom severity correlates with anatomic extent of disease
- For therapy and prognostication

Ulcerative Colitis Severity Index

Sign/symptom	Mild	Moderate	Severe
Albumin (g/dL)	Normal	3.0 to 3.5	< 3.0
Body temperature	Normal	99 to 100°F	> 100°F
Bowel movements	< 4 /day	4 to 6 / day	> 6 /day
ESR (mm/hour)	< 20	20 to 30	> 30
Hematocrit (%)	Normal	30 to 40	< 30
Pulse (beats/min)	< 90	90 to 100	> 100
Weight loss (%)	None	1 to 10	> 10

Diagnosis of UC

- Characteristic history
- Typical endoscopic appearance
  - Erythematous mucosa, petechiae, exudates, touch friability, frank hemorrhage
  - Macroulcerations, copious exudates
  - Pseudopolyps (reaction to prior inflammation) → chronic

Diagnosis of UC

- Colonic biopsy & histology
  - crypt abscesses
  - branching of crypts
  - atrophy of glands
  - loss of mucin in goblet cells

  } chronic

- CT – marked thickening of bowel wall (nonspecific)

Differential diagnosis

- Any condition that produces chronic, intermittent diarrhoea
  - Crohn's disease
  - Ischemic colitis
  - Infectious colitis
  - Irritable bowel syndrome (IBS)
  - Pseudomembranous colitis
  - Radiation colitis

UC or Crohn's

Feature	Ulcerative colitis	Crohn's disease
Abdominal pain	Variable	Common
Diarrhoea	Severe	Less severe
Depth of inflammation	Mucosal	Transmural
Distribution	Diffuse, contiguous spread always involves rectum spares proximal GIT	Segmental, noncontiguous (Skip) less common rectal involvement occurs in entire GIT
Fistula & sinuses	Rare	Common

Medical management of UC

Mild to moderate proctitis or proctosigmoiditis

Inducing remission

- 5-ASA OR steroid suppository, plus enema

  OR
- Oral 5-ASA
- If no response, Both
- Add oral steroid

Maintenance

1 oral or rectal medication

Medical management of UC

Mild to moderate left-sided colitis

Inducing remission

– Oral 5-ASA plus

5-ASA (or steroid)

suppository & enema

– + oral prednisolone

– + 6-MP/azathioprine

– Infliximab or colectomy

Maintenance

- oral 5-ASA
- + rectal 5-ASA /steroid
- 6-MP /Azathioprine
- Infliximab (anti-TNF)

Medical management of UC

Severe ulcerative colitis

- bowel rest, nutrition & parenteral steroids
- + oral 5-ASA
- + 5-ASA or steroid enema
- 6-MP or Azathioprine
- IV antibiotics (Fulminant colitis)
- Surgical consultation – toxic megacolon
- IV Cyclosporine or Infliximab
- Colectomy

Surgical Management of UC

- **Elective surgery**
  - UC resistant to maximal medical therapy
  - Dysplasia or Cancer in longstanding UC

- **Surgical options**
  - Proctocolectomy with ileostomy
  - Restorative proctocolectomy with ileal pouch–anal anastomosis (IPAA)
  - Subtotal colectomy with ileostomy
  - Proctocolectomy with continent ileostomy
  - Subtotal colectomy with ileoproctostomy

Surgical Management of UC

- **Emergency surgery**
  - Fulminant colitis
    - (severe UC with > 10 stools/day, anaemia requiring transfusion, toxic megacolon & abdominal tenderness)
  - Complications
    - Massive hemorrhage
    - Perforation
    - Toxic megacolon

Surgical Management of UC

- **Surgical options** (emergency)
  - Subtotal colectomy with ileostomy
  - IPAA 6 months later

Summary

- Perforative peritonitis in ulcerative colitis → >50% mortality
- Perforation in absence of toxic megacolon rare
- Surgery indicated
- Successful non-operative management, in this patient