جامعة الأميرة نورة بنت عبدالرحمن
Princess Nourah bint Abdulrahman University

Managing IBD flares

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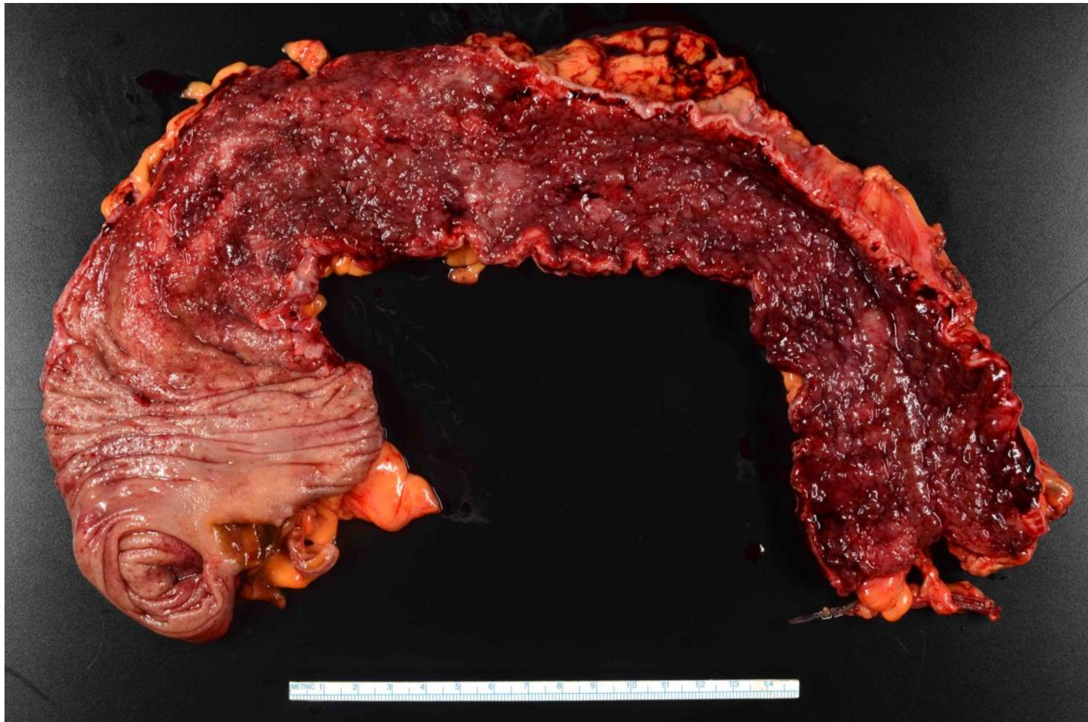
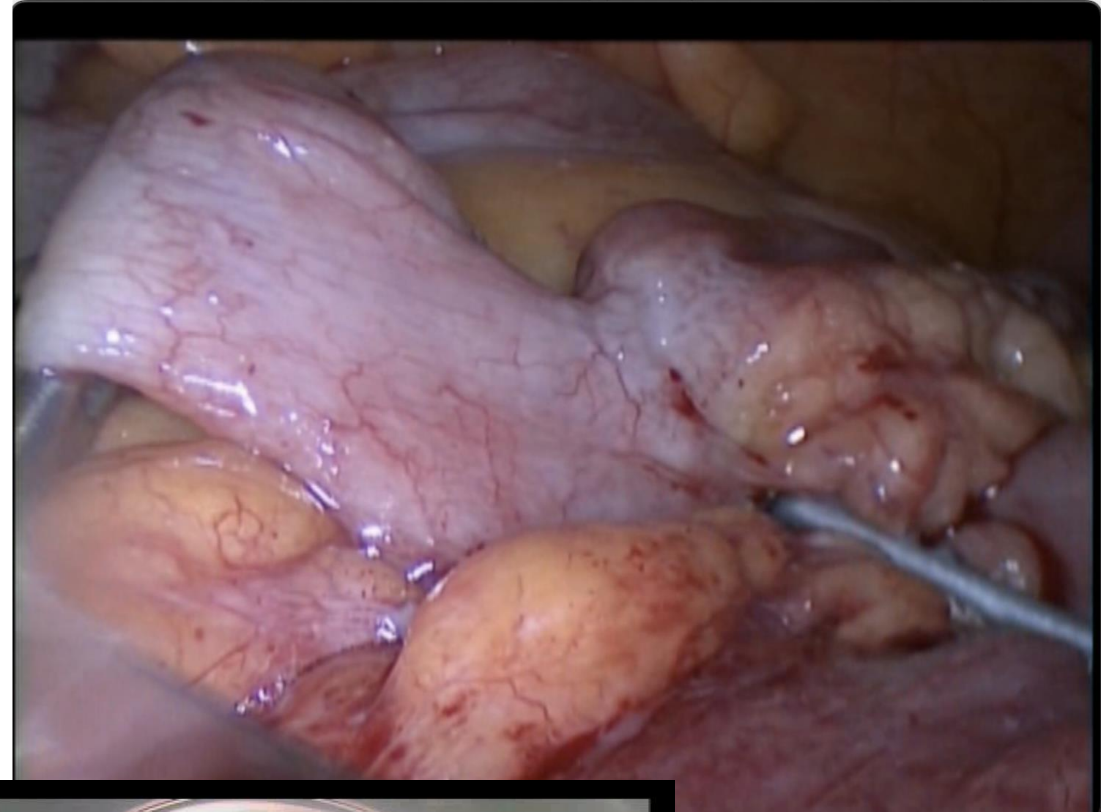
Disclosure

- Non

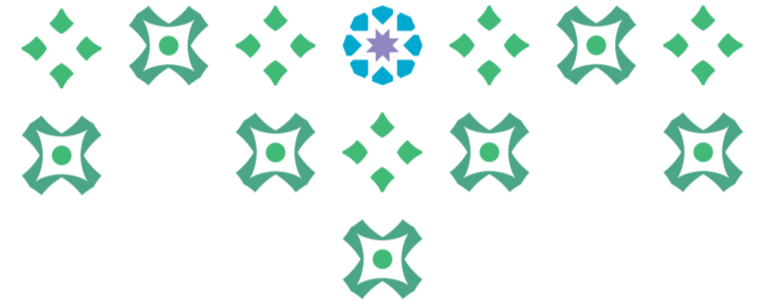
Complicated IBD





Recurrent
Crohn's Disease
with ileosigmoid fistula

IBD "flare-ups"



Definition

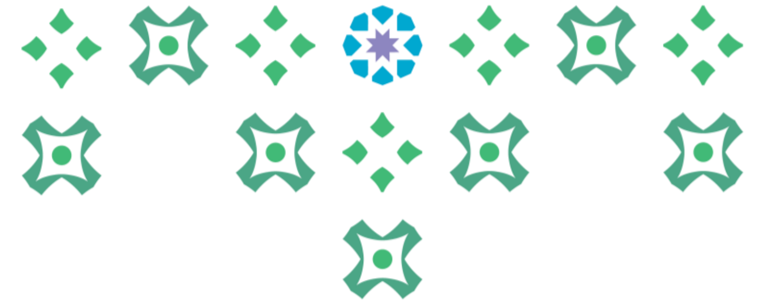
- Flare is a poorly defined term

- Active? a relapse? or an exacerbation ?

- According to NICE guidelines:

➢ An IBD flare-up is defined as a period of **increased** inflammatory activity and **symptomatic** worsening in individuals with Crohn's disease or ulcerative colitis.

IBD "flare-ups"



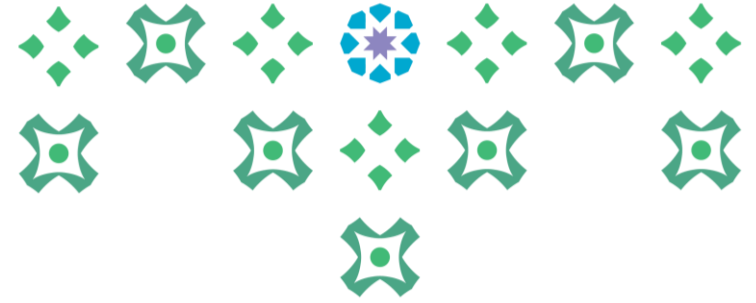
- NICE outlines the following criteria for diagnosing an IBD flare-up:

1. **Symptoms:** An increase or recurrence of typical symptoms, such as abdominal pain, diarrhea, rectal bleeding, or urgency to empty the bowels.

2. **Objective evidence :** of increased disease activity, through clinical examination, laboratory tests, endoscopic evaluation, or imaging studies.

3. **Daily life :** The symptoms and disease activity should be significantly impacting the individual's well-being and quality of life.

Tools for Assessing IBD Flares



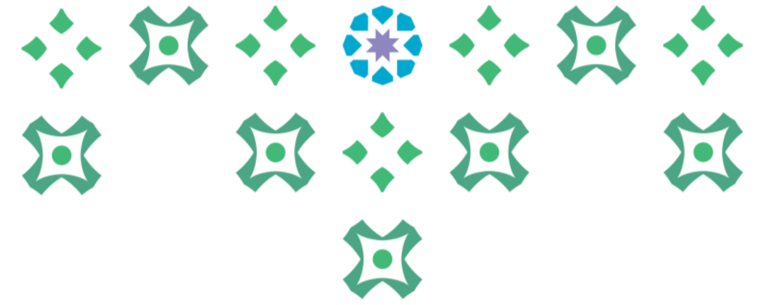
Clinical

- Travis criteria
- Partial Mayo Score
- Truelove & Witts criteria
- Harvey-Bradshaw Index (HBI)
- Crohn's Disease Activity Index (CDAI)
- Simple Clinical Colitis Activity Index (SCCAI)
- Inflammatory Bowel Disease Questionnaire (IBDQ)

Endoscopy

- Rutgeerts Score
- Mayo Endoscopic Score
- Simple Endoscopic Score for Crohn's Disease (SES-CD)
- Crohn’s disease endoscopic index of severity (CDEIS)
- Ulcerative Colitis Endoscopic Index of Severity (UCEIS)
- Ulcerative Colitis Colonoscopic Index of Severity (UCCIS)

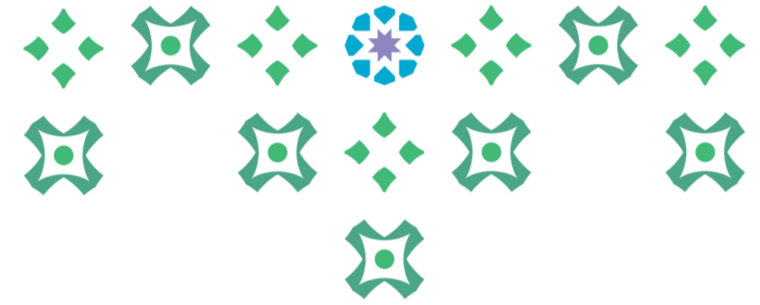
Scores for Inflammatory Bowel Disease

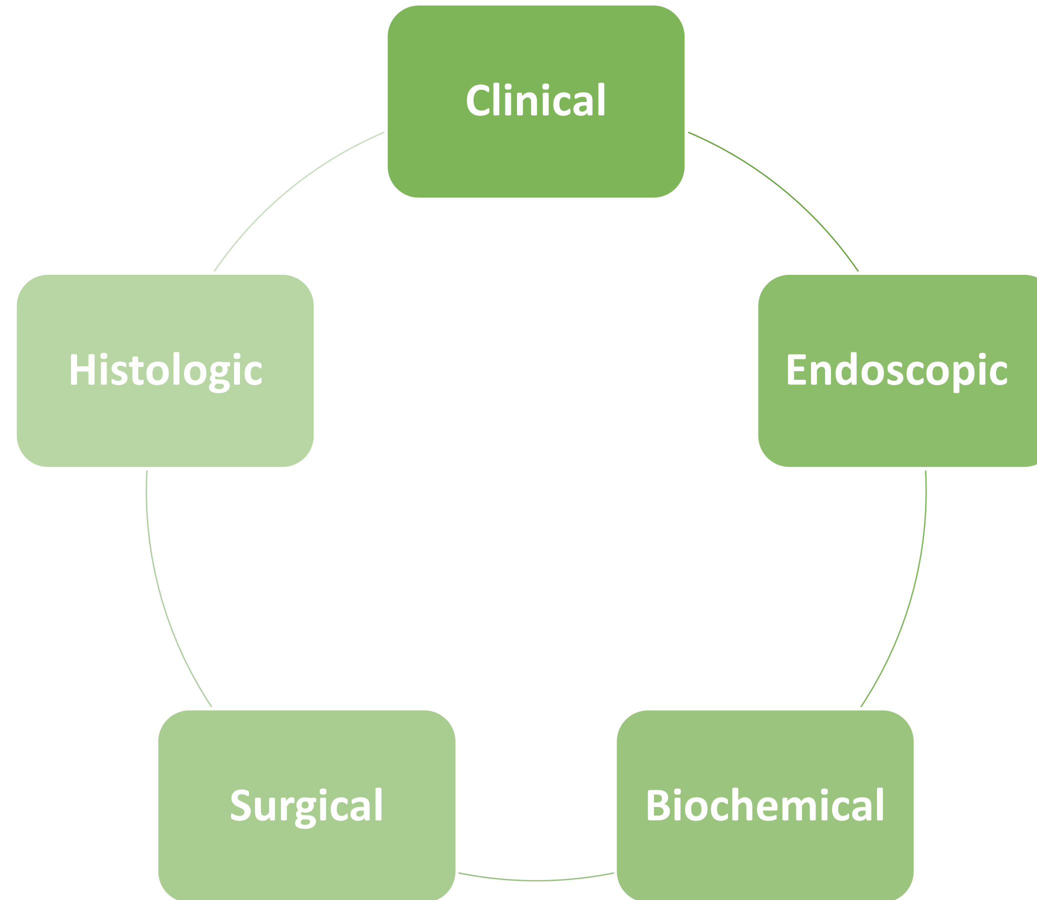


Statement 4.1. ECCO-ESGAR Diagnostics GL [2018]

Clinical indexes are useful for standardising disease activity. However, despite widespread use, no score has been validated in clinical practice [EL5]

The Flare-Up and Remission Cycle of IBD





Postoperative endoscopic recurrence precedes clinical recurrence

(useful prognostic factor for clinical recurrence)

Disease activity

Active

	Crohn's disease	UC	Pouchitis
Active disease (clinical scores)	• CDAI *>150 • HBI **>5	• MAYO score for Ulcerative Colitis Index >2	Pouchitis Disease Activity Index >4
Active disease (endoscopic scores)	• SES CD*** >3 • CDEIS**** >3	• MAYO score >1 • UCEIS***** >2	
Active disease (biochemical scores)	• CRP >5 mg/L • FCP# >250 µg/g	• CRP >5 mg/L • FCP >250 µg/g	

* Crohn's Disease Activity Index

** Harvey Bradshaw Index

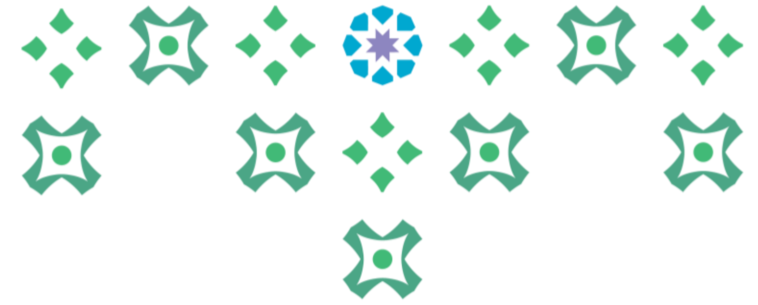
*** Simple Endoscopic Score for Crohn's Disease

**** Crohn's Disease Index of Severity

faecal calprotectin

***** Ulcerative Colitis Endoscopic Index of Severity

Disease activity



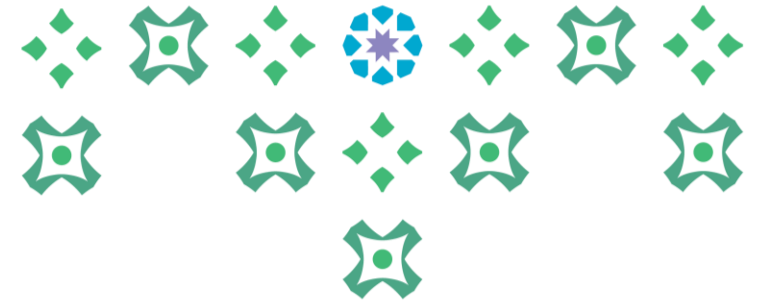
Remission

	Crohn’s disease	UC	Pouchitis
Remission (clinical scores)	• CDAI <150 • HBI <4	• MAYO score <2 and no individual subscore >1	
Remission (endoscopic scores)	• SES CD: 0–2 • CDEIS <3	• UCEIS <1 • MAYO score ≤1	
Remission (biochemical scores)	• CRP <5 • FCP <250	• CRP <5 • FCP <250	

Disease activity

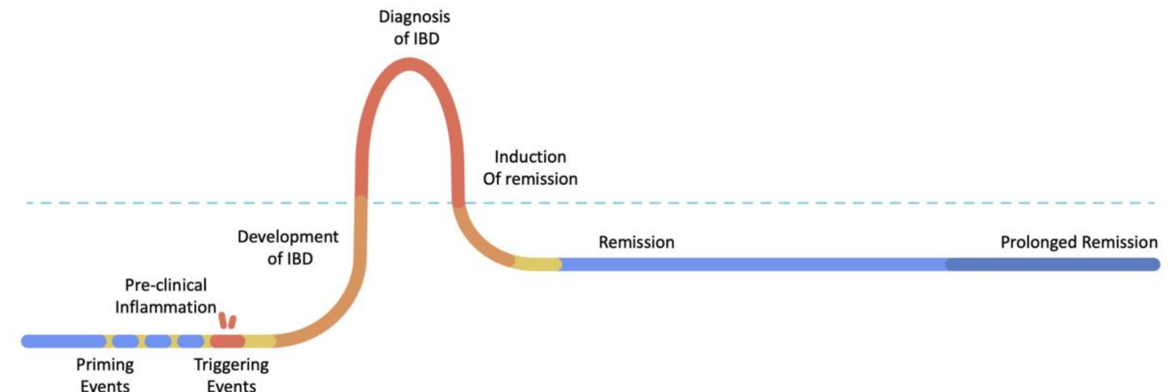
Response

	Crohn's disease	UC	Pouchitis
Response (clinical scores)	CDAI-70, CDAI-100 HBI drop by 3 or more points	Reduction of baseline MAYO score by ≥3 points and a decrease of 30% from the baseline score with a decrease of a least one point on the rectal bleeding subscale or an absolute rectal bleeding score of 0 or 1	
Response (endoscopic scores)	50% drop in the SES-CD	Decrease in MAYO endoscopic score ≥1 grade or decrease in UCEIS ≥2 points	
Response (biochemical scores)	This is not defined		

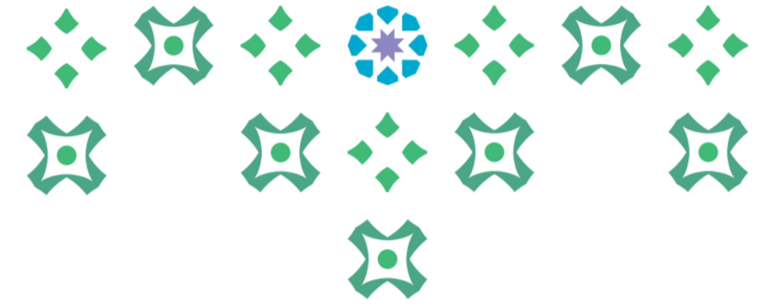


- Endoscopic healing is a therapeutic goal in recent clinical trials and clinical practice

- The way to minimize steroid use, avoid admissions and reduce colectomy rates in IBD is by expediently managing disease flares



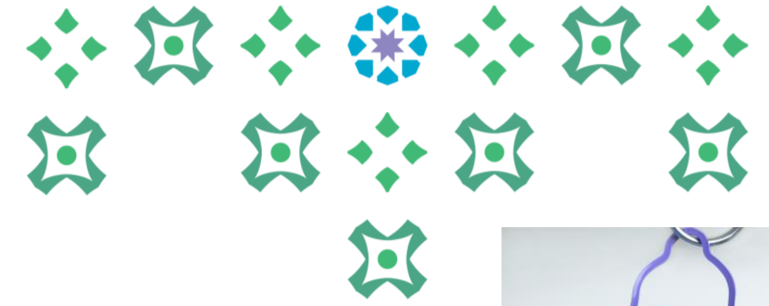
(STRIDE): Determining Therapeutic Goals for Treat-to-Target. Am. J. Gastroenterol. 2015



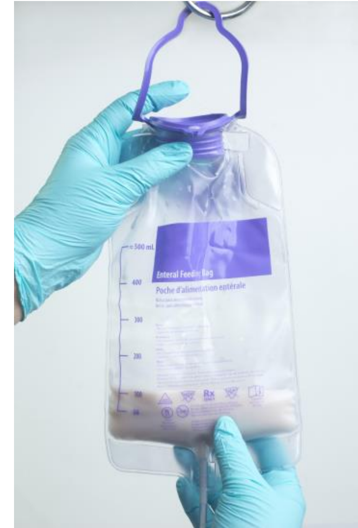
Surgical indications

What are the indications for emergency surgery in patients presenting with complications related to IBD?

Main acute complications Ulcerative Colitis	Main acute complications Crohn's Disease
Acute severe colitis	Acute severe colitis
Toxic megacolon	Toxic megacolon
Uncontrolled bleeding	Uncontrolled bleeding
Colonic perforation	Free perforation
	Abscess/fistula
	Intestinal obstruction



Preoperative management

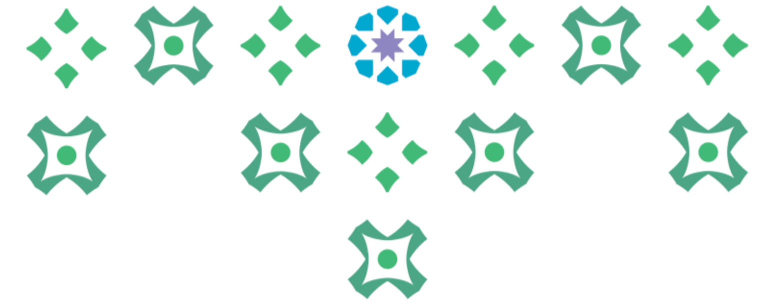


In patients presenting with complications related to IBD, what is the appropriate medical treatment and nutritional support?

- Evaluating medical treatment in IBD patients presenting with acute abdominal pain and disease activity in a **multidisciplinary approach**

(Strong recommendation based on low level evidence 1C).

WSES-AAST guidelines: management of inflammatory bowel disease in the emergency setting. *World J Emerg Surg* **16**, 23 (2021).



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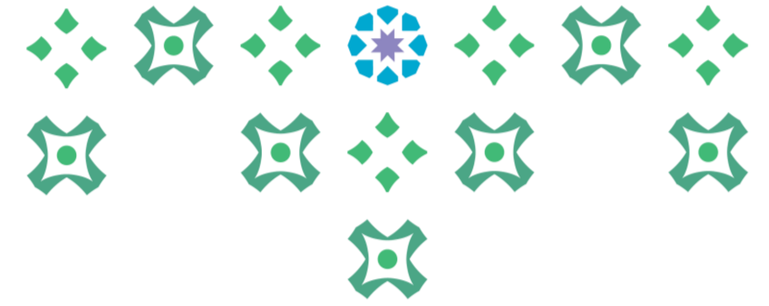


Operative management

❖**Acute severe ulcerative colitis: Truelove and Witt's criteria :**

❖Presence of more than 6 bloody stools along with any one of the following:

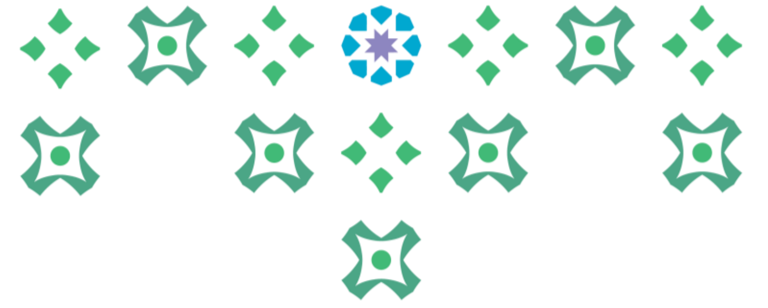
- tachycardia > 90 bpm. - fever > 37.8 °C - Hb < 10.5 gm/dL - and/or ESR > 30 mm/h

- **Stable patients** : multidisciplinary approach with the gastroenterologist to decide on options for initial medical treatment first. (Weak recommendation based on low level evidence 2C)

- **Unstable patients**: Emergency surgical exploration (damage control principles)
- Subtotal colectomy with ileostomy is the surgical treatment of choice .

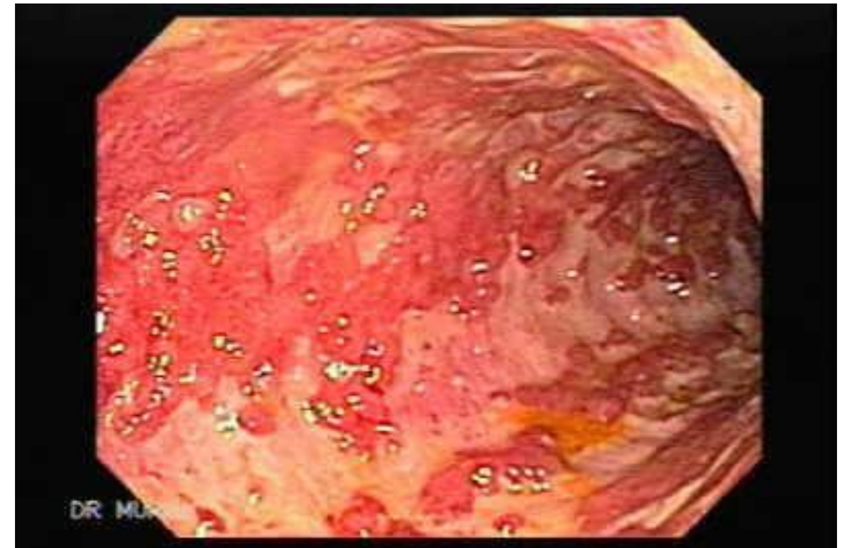
(Strong recommendation based on high level evidence 1A)

WSES-AAST guidelines: management of inflammatory bowel disease in the emergency setting. World J Emerg Surg 16, 23 (2021).

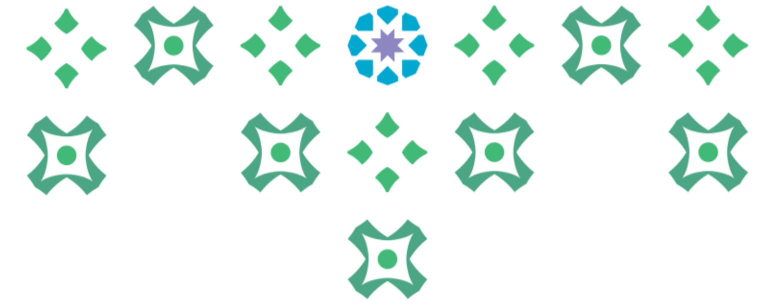


Acute severe ulcerative colitis

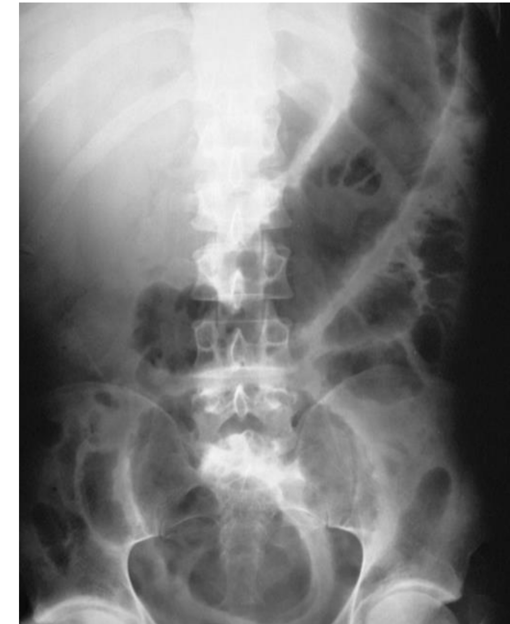
Statement 20. We recommend that patients with ASUC who have not responded within 7 days of rescue therapy with infliximab or ciclosporin, or those with a deterioration or complications before that time (including toxic megacolon, severe haemorrhage or perforation) require subtotal colectomy and ileostomy, with preservation of the rectum (GRADE: strong recommendation, very low-quality evidence. Agreement: 97.4%).



Operative management



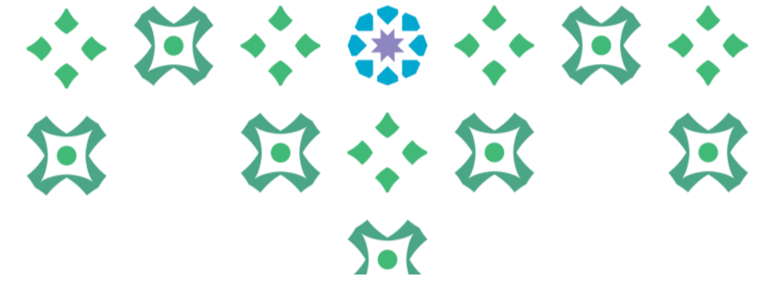
❖**Toxic megacolon:** Jalan et al in 1969, criteria for diagnosis:



- Radiographic evidence of colonic dilatation: more than 6-cm dilatation in the transverse colon.
- Any three of the following:- Fever (>38°C)
  - Tachycardia (>120 beats/min)
  - Neutrophilic leukocytosis (>10.5 x $10^3/\mu L$)
  - Anemia
- Any of the following: Dehydration, altered mental status, electrolyte abnormality, or hypotension

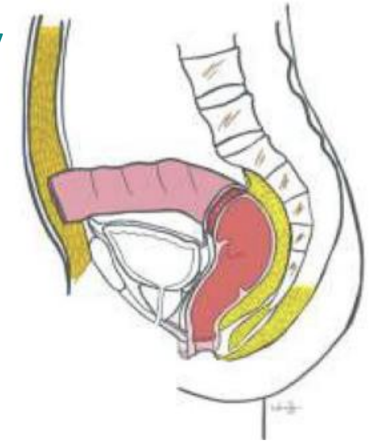
- Consult **colorectal surgeon** early and operate early before reaching DIC and organ failure .

Jalan et al , An experience of ulcerative colitis. I. Toxic dilation in 55 cases, Gastroenterology. 1969



Operative management

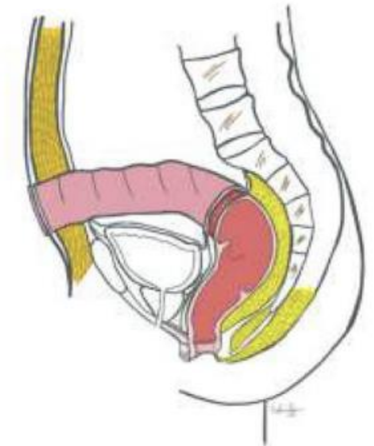
subcutaneously



❖Toxic megacolon:

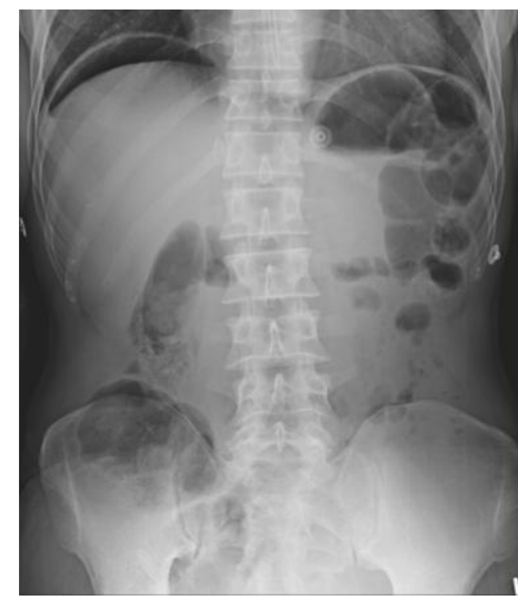
- **If stable:** lap total colectomy, end ileostomy, rectal stump brought, if possible, as mucous fistula
- **If unstable** then open surgery and total colectomy, end ileostomy, rectal stump brought, if possible, as mucous fistula

- Surgery should be performed by an experienced colorectal surgeon



mucous fistula

Operative management



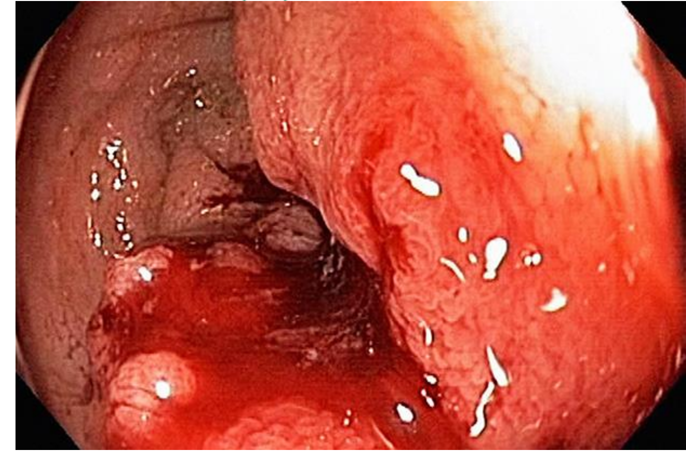
❖Free perforation:

❖Usually cecal and related to toxic megacolon

- Stable patients: laparoscopic approach with resection, lavage and stoma, localized contamination → anastomosis (?other factors)
- Unstable patient : damage control surgery (resection, stapled off bowel ends and temporary closure) return in 24–48 h for a second look.

- Total colectomy, end ileostomy, rectal stump brought, if possible, as mucous fistula

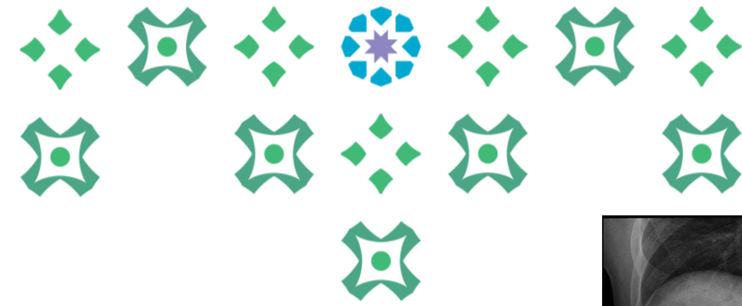
Operative management

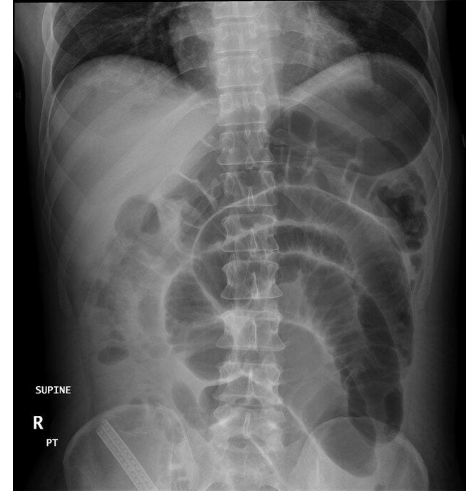


❖Uncontrolled bleeding:

- Usually noticed in toxic megacolon.
- Surgery follows the standard of toxic megacolon.
- Avoid proctectomy to preserve the option of a pouch in the future.
- Proctectomy in a case of massive bleeding is risky and invites massive pelvic bleeding due to lack of adequate coagulation.
- Surgery should be performed by an experienced colorectal surgeon

Operative management





❖Intestinal obstruction:

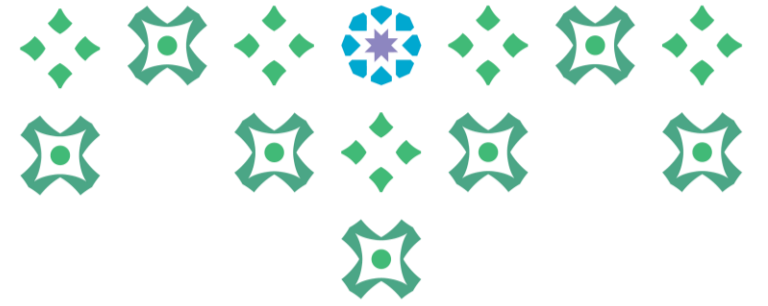
- Rarely encountered and depends on the etiology:

➢ A. Suspected cancer, then a diverting stoma. Stents are relatively contraindicated in IBD (risk of perforation in inflamed bowel)

➢ B. If Crohn's, then it is usually mixed inflammatory/fibrotic and a **steroid dose** could reduce the inflammation and open the obstruction, if **failed** then surgical resection.

➢ Avoid anastomosis in dilated proximal bowel as has high risk of leak.

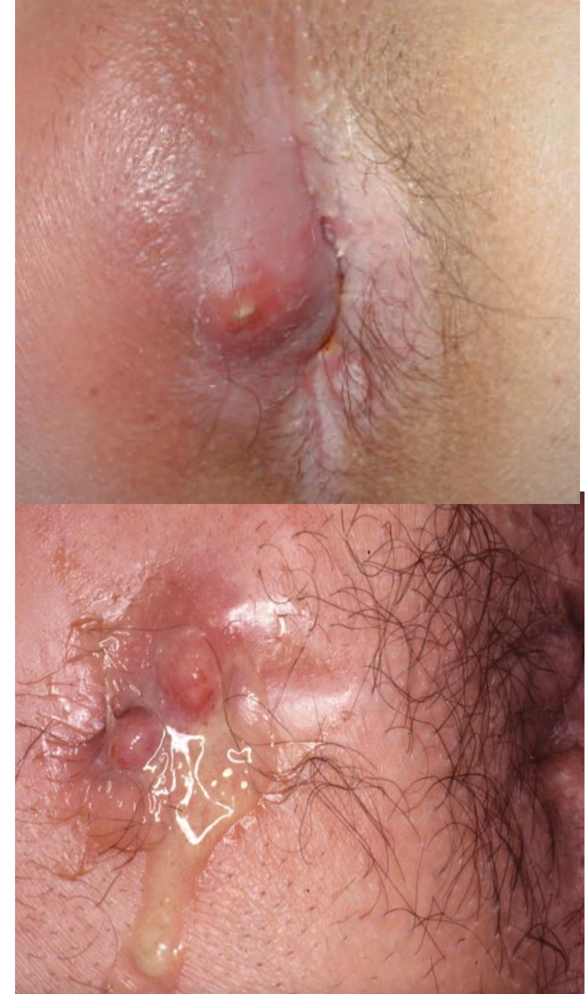
Operative management



❖Sepsis:

- **If stable,** Percutaneous drainage of intra-abdominal abscesses > 3 cm+ antibiotics (successful in most case).
- **If unstable** which is rare and thus open surgical drainage plus resection of the perforated bowel without anastomosis.
- Surgery should be performed by an experienced colorectal surgeon

Operative management

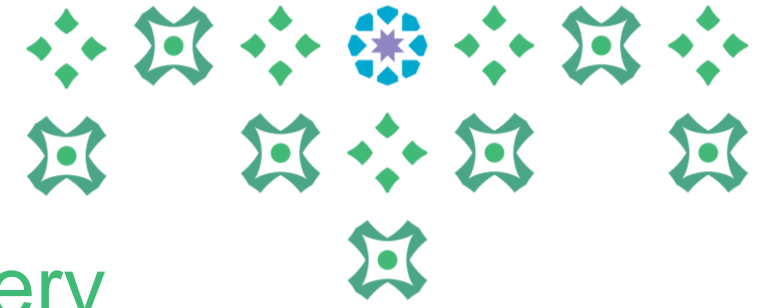


How to manage perianal sepsis in the emergency setting?

- Acute abscess: I&D under GA .
- No active attempt should be made to find an associated anal fistula !!

- **If an obvious fistula exists (without probing):** fistula should **not** be laid open and a loose draining seton should be inserted Only!

(Strong recommendation based on low level evidence 1C)



Rescue treatment in flare up prior to surgery

- In the past was high dose steroid therapy : increased the risk of morbidity and mortality in patients who failed such treatment and had to go to surgery.

- The recent recommendation is to use Anti-TNF treatment

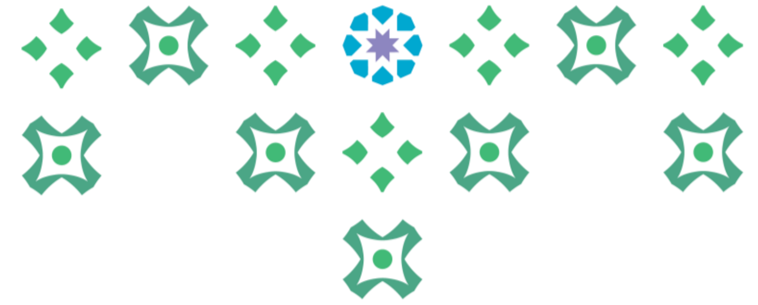
Either infliximab or cyclosporine should be used in adult patients with steroid-refractory ASUC. When choosing between these strategies, centre experience and a plan for maintenance therapy after cyclosporine should be considered [EL3]

Statement 18. We recommend that patients with ASUC failing to respond by day 3, as judged by a suitable scoring system, should be treated with rescue therapy in the form of intravenous infliximab or ciclosporin for patients who have not previously failed thiopurine therapy (GRADE: strong recommendation, high-quality evidence. Agreement: 97.8%).

ECCO Guidelines on Therapeutics in Ulcerative Colitis: Surgical Treatment

British Society of Gastroenterology consensus guidelines .Lamb CA, et al. Gut 2019;

Conclusion



- Avoid steroids as rescue treatment

- Drain abscesses

- Operate early before patient going in DIC and organ failure

- No lap surgery in unstable or fecal peritonitis

- Always refer to an experienced colorectal surgeon such high risk complex cases

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شكراً لكم

Thank You