



# **Acute IBD in AMU- Do`s & Don`ts in 24 hours**

**Prof S Sebastian**

how to get  
away with **out**

*Murder*



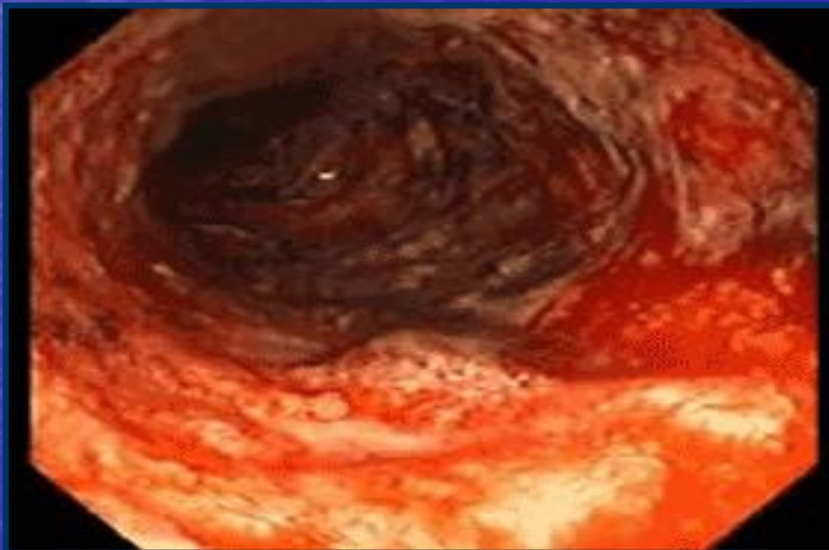


# Key aspects in approach to acute IBD in AMU ....



- Assessing and managing the Severity
- Assessing and managing Risk

# Footballer with Pan-colitis







## Case vignette 1...

- 26 year old male
- Diarrhoea for 3 weeks
  - >12 times per day
  - blood and mucous
- No pain
- No history of travel
- Exam:
  - Temp 37.8, HR 110/min, Pale
  - Abdomen : Not distended but mildly tender diffusely
- Bloods:
  - Hb 97, WCC 11.2, Monocytes 1.78, Platelets 611
  - Urea 4.8, Potassium 3.3 , ALT 102, Albumin 31, CRP 112



# Clinical severity assessment

- Mild
  - Less than 4 stools /day with or without blood
  - No systemic disturbance
  - Normal Plasma viscosity/ESR
- Moderate
  - More than 4 stools/day
  - Minimal/ no systemic disturbance
  - Normal/ mild elevation in PV ( $<1.9$ ) /ESR ( $<25$ )
- Severe
  - More than 6 stools daily with blood
  - Evidence of systemic disturbance- fever, anemia, tachycardia
  - Plasma Viscosity  $>1.9$  /ESR  $>30$

**Modified Truelove & Witts Criteria**



# Blood markers of severity

## Day 1



- Serum albumin
- Monocyte count
- Platelet count
- CRP/albumin ratio
- ???? CRP , calcitonin, CD 69

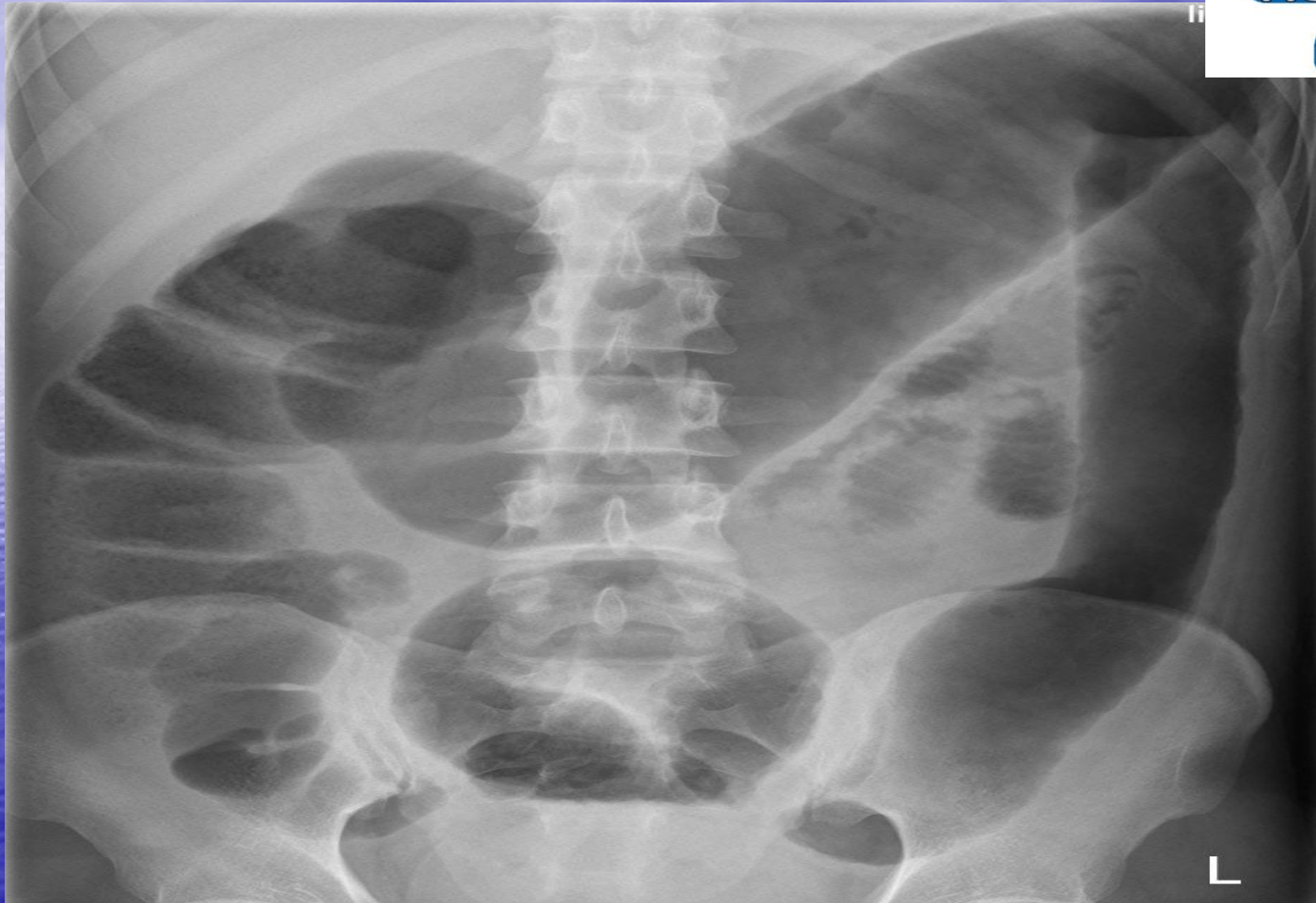


# Additional tests in first 24 hours?

- Imaging
  - Abdominal X-ray Vs 
- Stool
  - Cultures and C. Diff
- Scope
  - Unprepared Flexi



# Severity Assessment Day 1 X ray



# Severity assessment Day 1

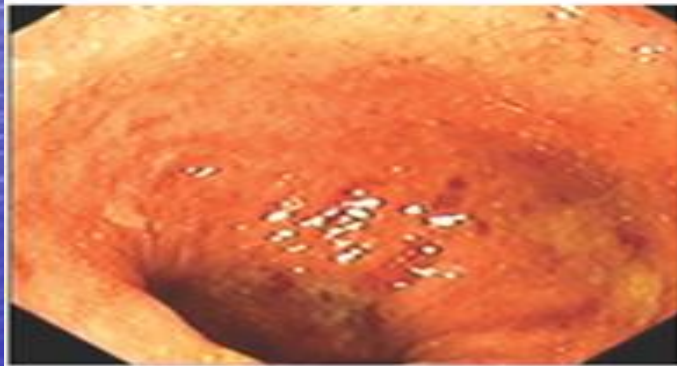
## Sigmoidoscopy



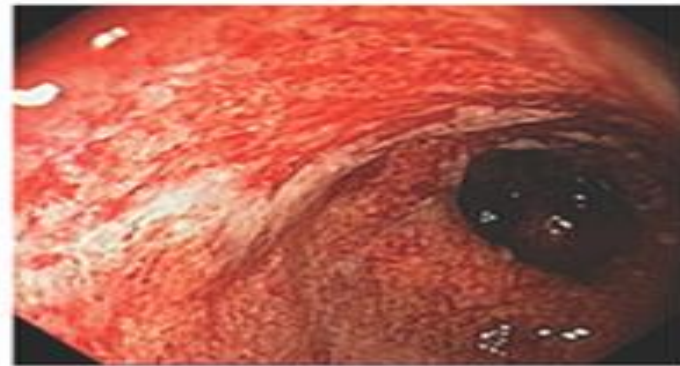
**0** Normal or inactive disease



**1** Mild disease (erythema, decreased vascular pattern, mild friability)



**2** Moderate disease (marked erythema, absent vascular pattern, friability, erosions)



**3** Severe disease (spontaneous bleeding, ulcerations)



# Infection and Flare up of UC



- Infections contribute in 14-16% of flare ups of UC
- Steadily increasing concern in IBD patients
- Retrospective studies- higher C Diff rates than other hospitalized patients

Roderman et al Clin Gastro Hepatol 2007

Issa M et al Clin Gastro Hepatol 2007

- Prevalence 39.4/1000
- ? Selection bias

# C Difficile in IBD



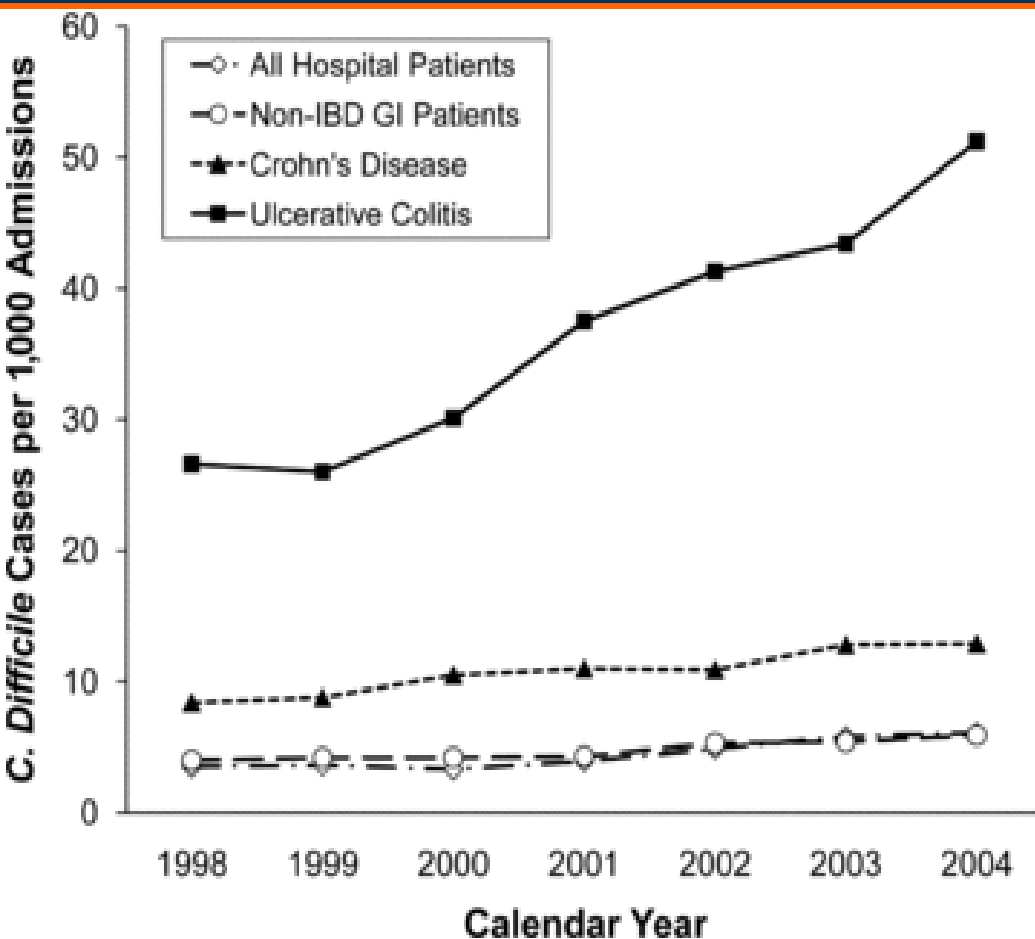
- May not have clear history of antibiotic use/hospitalization
- Community acquired C diff does not have a better prognosis
- Risk of toxic megacolon 2-3%
- No evidence @present for increase in hypervirulent strain in IBD cohort
- Predictors of higher risk
  - Females
  - Colonic involvement
  - Winter and spring months
  - Multiple immunomodulators





# National survey (US) of C difficile

Nguyen et al Am J Gastro 2008



- **Prevalence**

- UC 37.3/1000

- Crohns 10.9/1000

- Non IBD 4.8/1000

- **Incidence** doubled in 7yrs

- Greater **Mortality** in UC (OR 3.79, CI 2.84-5.06) but not in Crohn`s (OR 1.66, CI 0.75-3.66)

- 45-65% increase in **duration** of stay and **costs**

# What treatment in first 24 hours?



- **IV steroids**

- |                                 |    |
|---------------------------------|----|
| – Wait for stool cultures?      | NO |
| – Wait for Flexi Sigmoidoscopy? | NO |
| – Wait for Gastro review ?      | NO |



# What treatment in first 24 hours



- **Correct hypokalemia**

- Single most important blood test in acute UC
- Act promptly
- Risk of colonic dilatation
- Aim for potassium around 4mmol

# What treatment in first 24 hours?



- Thromboprophylaxis
  - Prothrombotic state
  - High risk of severe thrombosis/unusual sites
  - No additional risk of bleeding



# What treatment in first 24 hours



- Diet
  - Nil orally NO
  - Low residue diet



# **What not do in first 24 hours**

- **Book CT scan of abdomen**
- **Wait to initiate steroids**
- **Drugs to avoid**
  - Anti diarrhoeal agents
  - Codeine
  - Tramadol
  - NSAIDs
  - Anti-cholinergics
  - Moviprep/Picolax/clean prep
  - Antibiotics



## Case (one don't want....)

- 47 yr old with known pancolitis on oral mesalazine
- Admitted via AAU for uncontrolled flare up despite oral steroids
- Stools > 10/day, Blood+++, abdominal pain
- CP 113, WCC 16, Platelets 497, Alb 27, K 2.9
- Started on IV steroids



## Case ...ctd



- 24hrs later- Diarrhoea settled but increasing pain
- Review by SHO- Tramadol
- Review by gastro
- Repeat AXR







# What is toxic megacolon?

- Non obstructive colonic dilatation in the presence of toxic colitis
- **Jalan Criteria**
  - Radiographic evidence of colonic dilatation ( Transverse >6cm)
  - 3 of 4: Fever, tachycardia, anaemia, leucocytosis
  - 1 of : hypotension, altered mentation, electrolyte imbalance
- Not exclusive to UC but can occur with infective, ischemic or radiation colitis



# Toxic megacolon in IBD

- Lifetime risk in UC- 1-2.5%
- 2-5% of severe attacks of UC needing admission develop megacolon.
- Risk factors
  - Extensive active disease
  - Use of loperamide, anticholinergics, opiates
  - Hypokalemia particularly after steroids





# Toxic megacolon in IBD....

- Perforation leads to mortality up to 20%
- Signs of peritonism may be masked by steroids
- Suspect micro perforation of increasing pain – only reason for considering CT in a colitic
- Serial x-rays
- Liaise with/ transfer care to gastroenterology and surgery

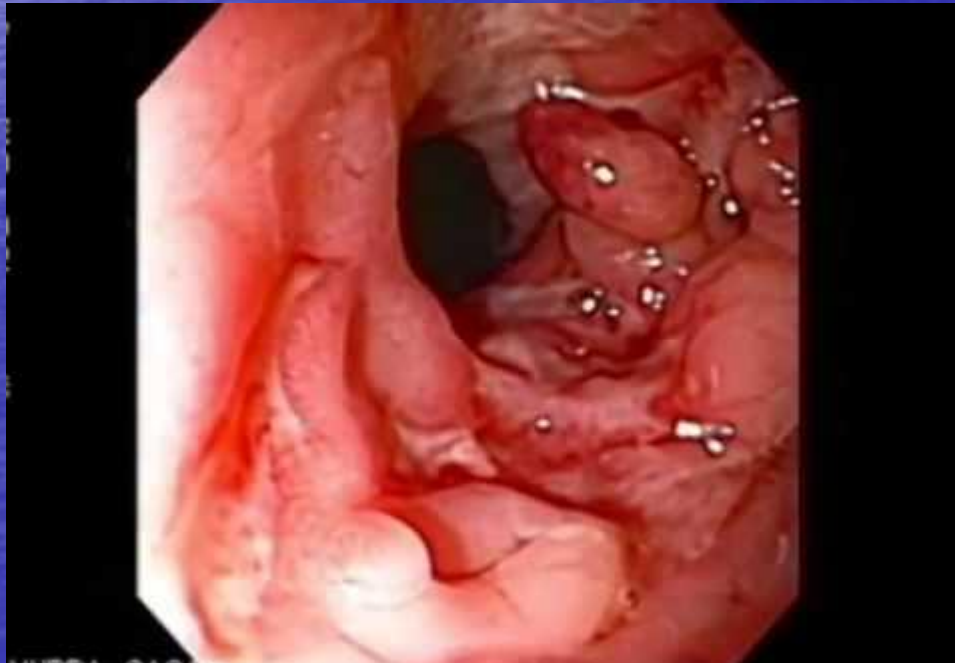
# Acute abdominal pain in a colitic



- Examine !!
- Look for peritonism- may be masked by steroids
- Abdo x-ray
- Look for and stop bowel paralytics
- Analgesia-morphine/ pethidine
- Seek help !!!



# Singer with Crohn's disease



# Case vignette.. 2



- 22 year old female
- Crohns for 1 year - Ileocolonic
- On azathioprine since last 2 months
- Admitted with acute abdominal pain, vomiting
- Exam: RIF tender with fullness  
: Perianal fistula with draining abscess
- Bloods : Hb 110, WCC 8.7, CRP 2, albumin 28





# Acute pain in a CD patient in AMU

- Complicated disease
  - Perforation
  - Obstruction
    - Luminal
    - Adhesive
- Drug complication
  - Drug induced pancreatitis
- Unrelated to CD

# What tests to order?



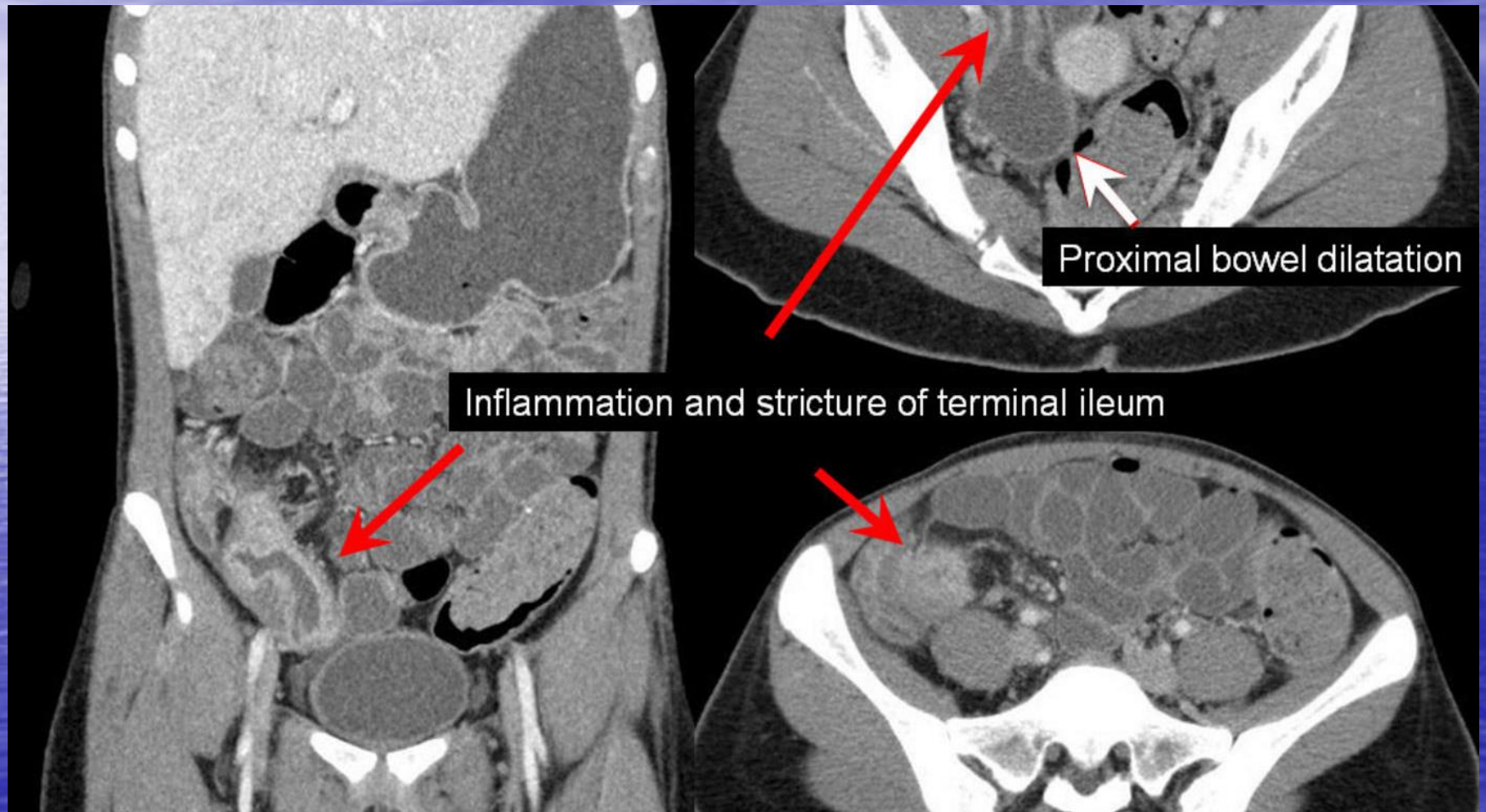
- Amylase
- Abdominal X-ray - often not beneficial
- Ultrasound - useful in expert hands
- Contrast CT - beware of cumulative radiation risk



# What treatment in AMU in first 24hours



- Analgesia
- IV fluids
- Thromboprophylaxis







# What not to give ?

- Until specialist review +/- imaging
  - Steroids

## **NO steroids if ....**

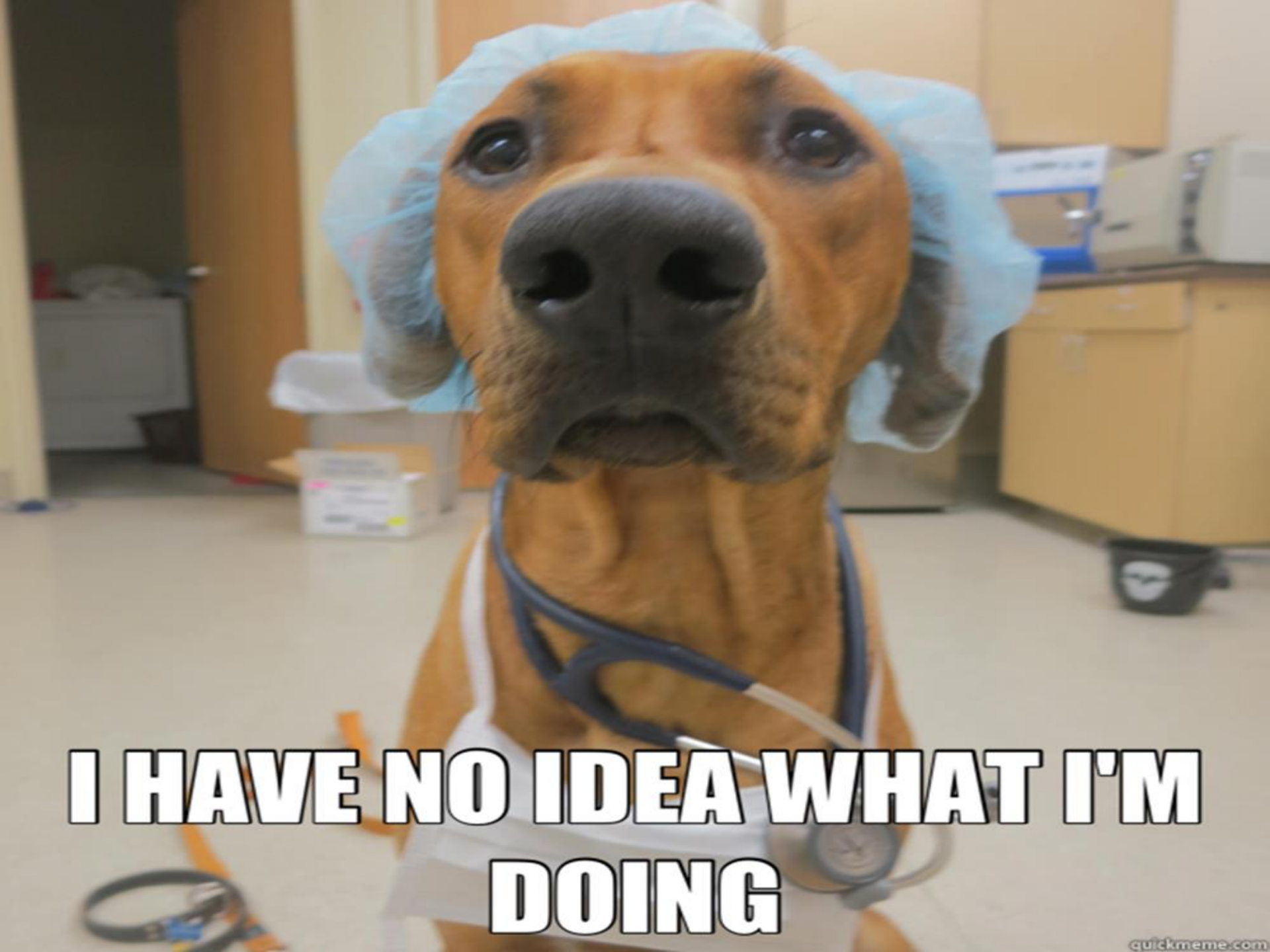
- Surgery planned/preferred option
- Inflammatory mass/ sealed of perforation
- Perianal Crohn`s

# Approach to Acute IBD in AMU summary

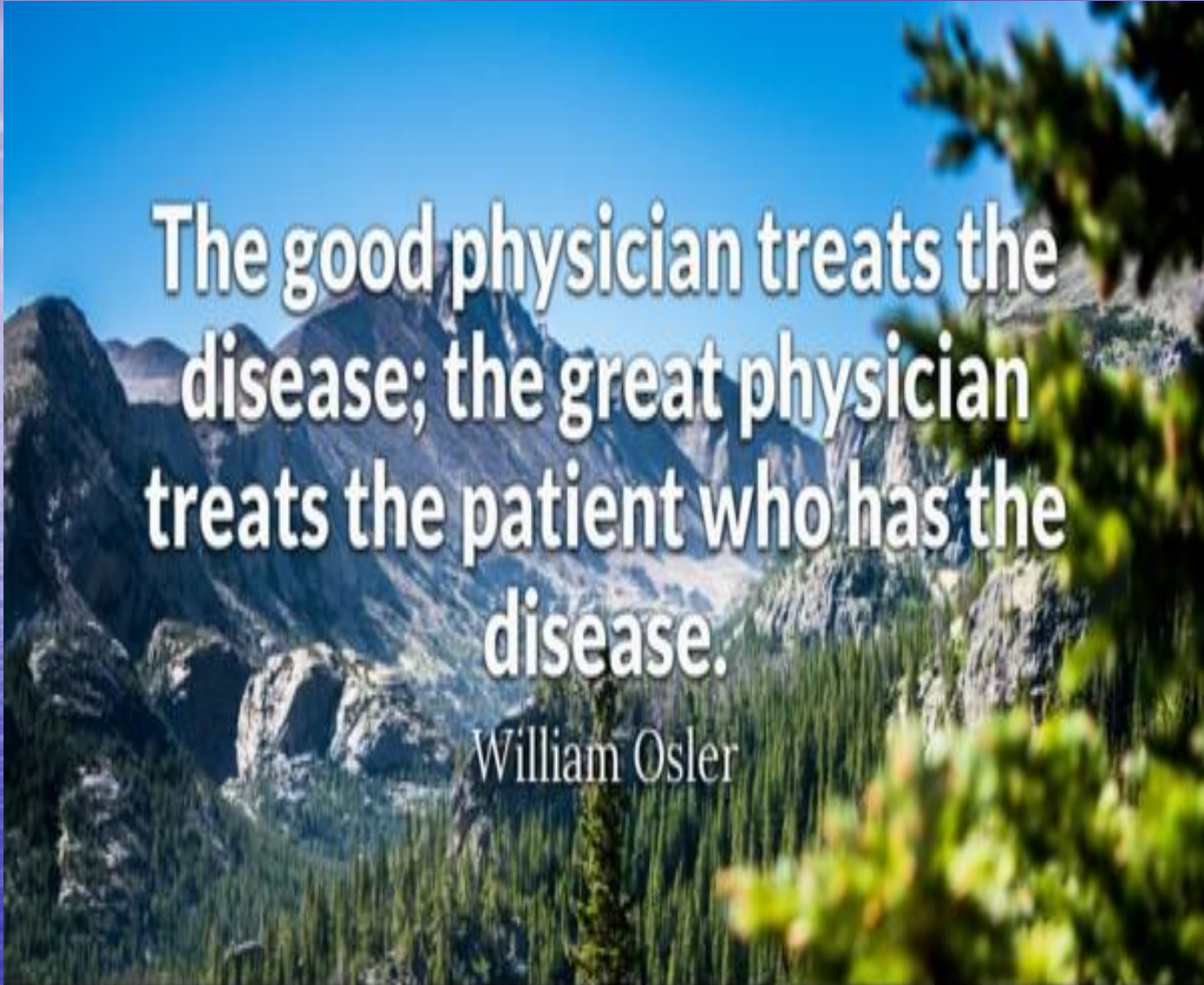


- Common sense approach
  - Assess severity
  - Assess risk
- Individualised approach
  - UC vs Crohns
  - Complication vs disease activity





**I HAVE NO IDEA WHAT I'M  
DOING**

The background of the quote is a scenic landscape. It features a clear blue sky at the top, followed by rugged, rocky mountains. The lower part of the image shows a dense forest of green trees. In the foreground on the right, there are out-of-focus green leaves and branches. The overall scene is bright and natural.

The good physician treats the  
disease; the great physician  
treats the patient who has the  
disease.

William Osler