GESA
Gastroenterological Society of Australia

GUT CENTRE

13 - 16 August 2024

Alice Springs Hospital

Daniel Lightowler

CNC & Transitional Nurse Practitioner IBD

Royal Prince Alfred Hospital

Adjunct Lecturer Internal Medicine

University of Western Australia

President GENCA

The epicentre of gastrointestinal and liver education in Australia

Our Partners

Proudly supported by NORTHERN TERRITORY GOVERNMENT

GENCA est. 1979

Our Sponsors

GESA AGW 2024 PLATINUM SPONSOR

Chiesi

OLYMPUS

abbvie

Pfizer

GESA AGW 2024 GOLD SPONSOR

CSL

novo nordisk

Emergency IBD Presentations

- Introduction to IBD
- Acute Severe Ulcerative Colitis
- Undrained Perianal Sepsis
- Acute Abdomen in an IBD Patient

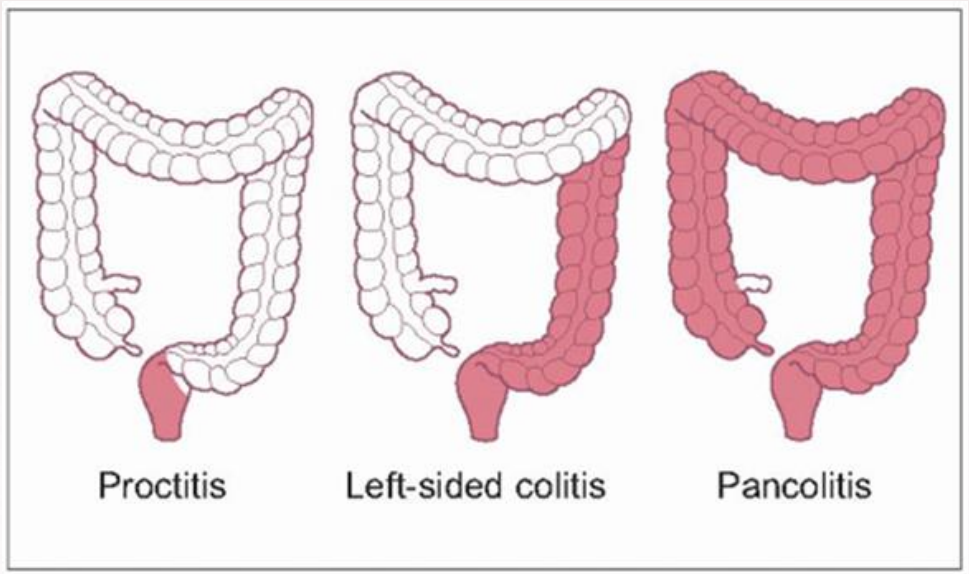
What is Inflammatory Bowel Disease?

- Idiopathic, Chronic, Inflammatory, Auto-immune condition affecting the gastrointestinal tract
- Refractory, Remitting and Relapsing
- 3 sub-conditions
  - Crohn's Disease
  - Ulcerative Colitis
  - Inflammatory Bowel Disease Unclassified

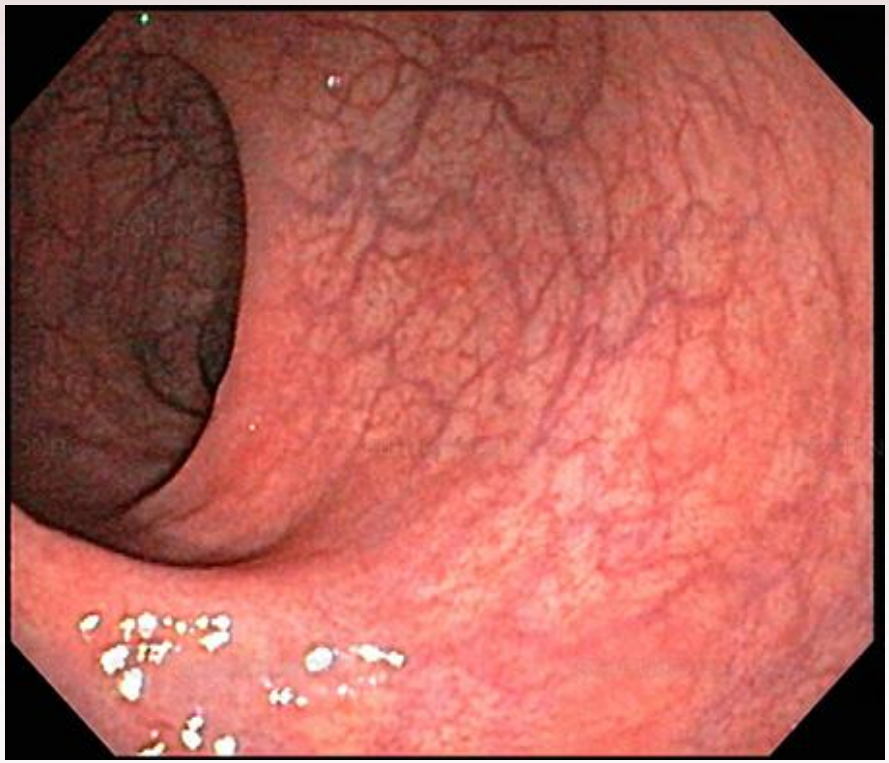
What is Inflammatory Bowel Disease?

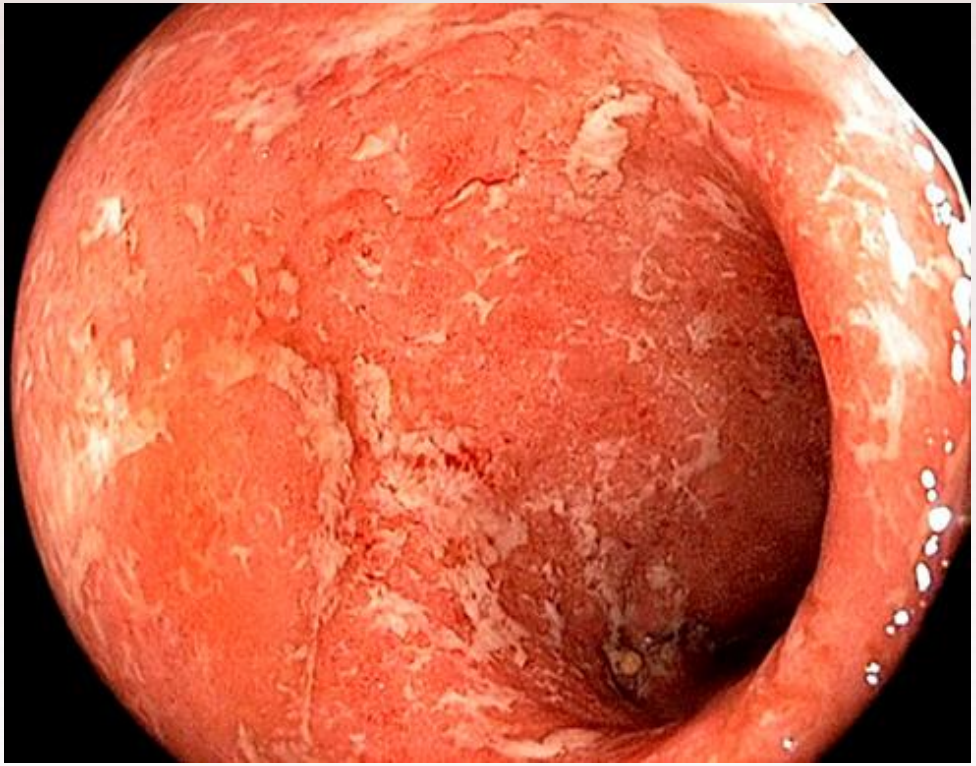
- Ulcerative Colitis Classifications:
  - E1 – Proctitis
  - E2 – Left Sided Colitis
  - E3 – Pan-Colitis

- Symptoms include:
  - Rectal Bleeding
  - Stool Frequency
  - Urgency
  - Tenesmus
  - Abdominal Pain
  - Fever



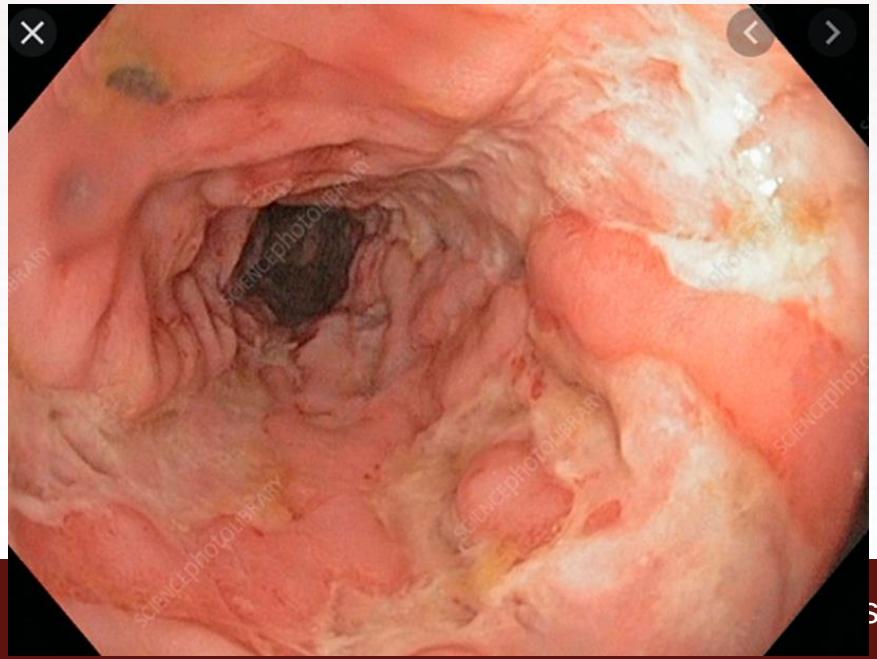
What is Inflammatory Bowel Disease?





What is Inflammatory Bowel Disease?

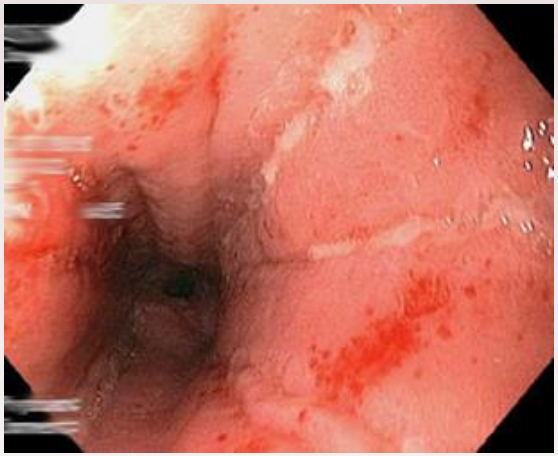
- Symptoms
  - Abdominal Pain
  - Bloating
  - Frequency
  - Rectal Bleeding
  - Weight loss or inability to maintain healthy weight
  - Cramping Pain
  - Vomiting

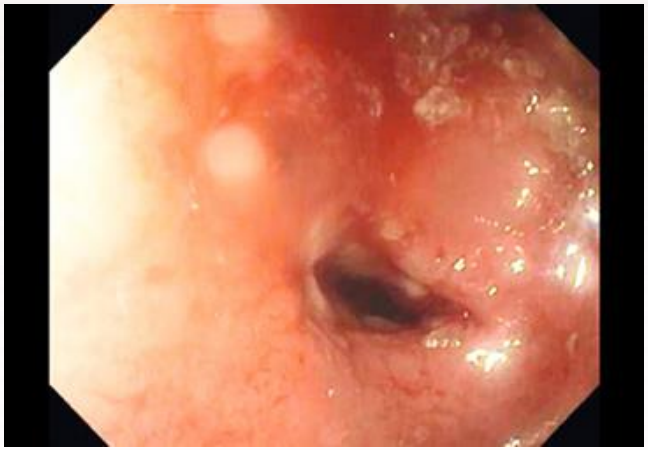


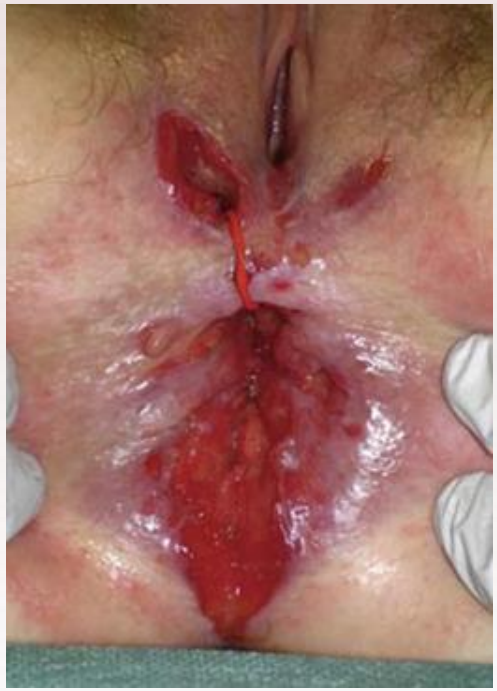
- Area
  - E1 – Ileal
  - E2 – Colonic
  - E3 – Ileal & Colonic
  - E4 – Upper GI
  - P – Perianal

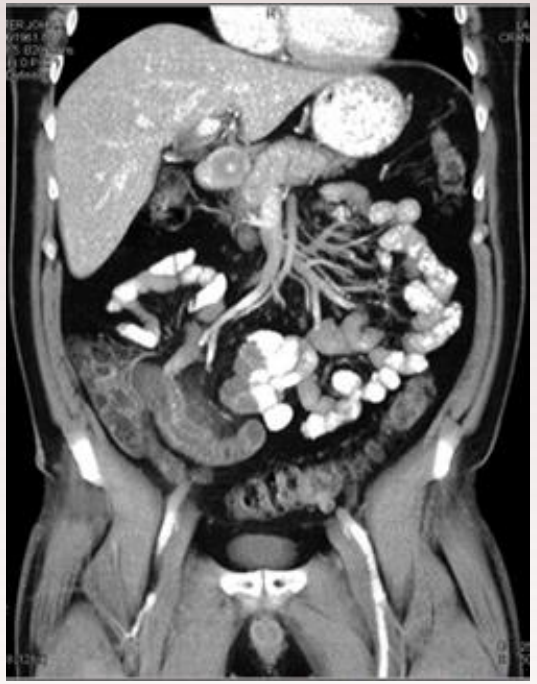
- Behaviour
  - B1 – Inflammatory
  - B2 – Stricturing
  - B3 – Penetrating

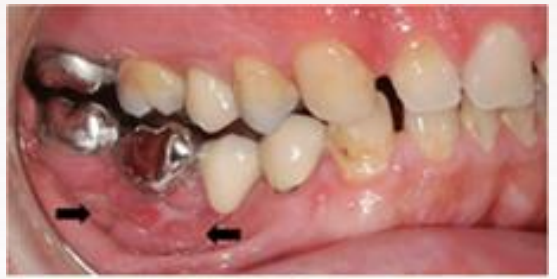
What is Inflammatory Bowel Disease?

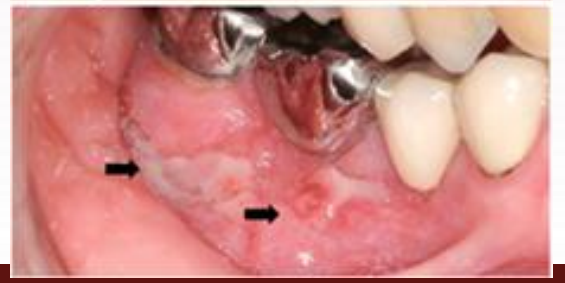




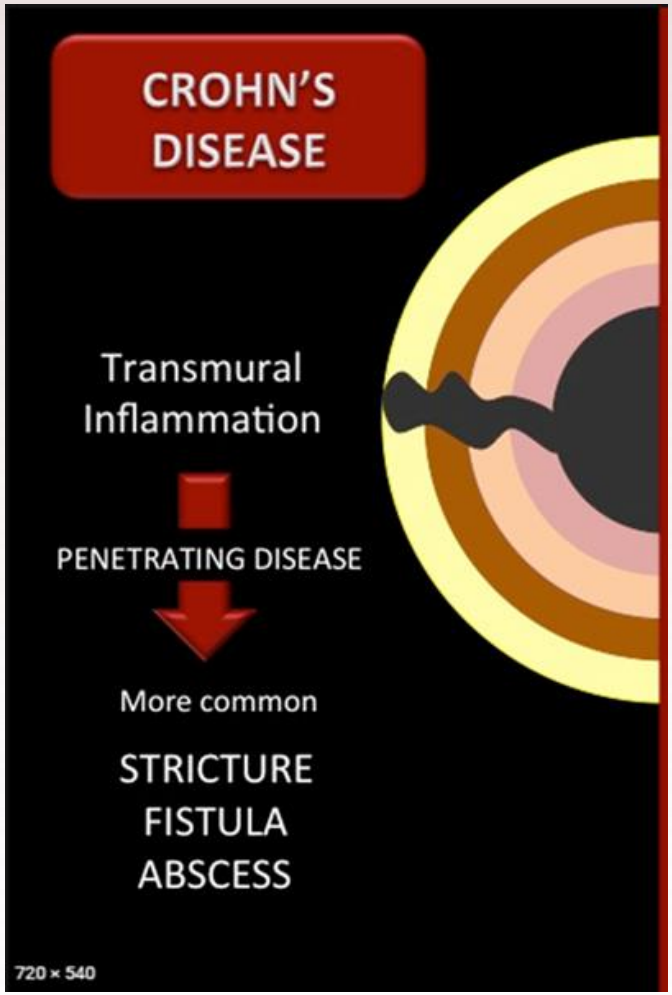


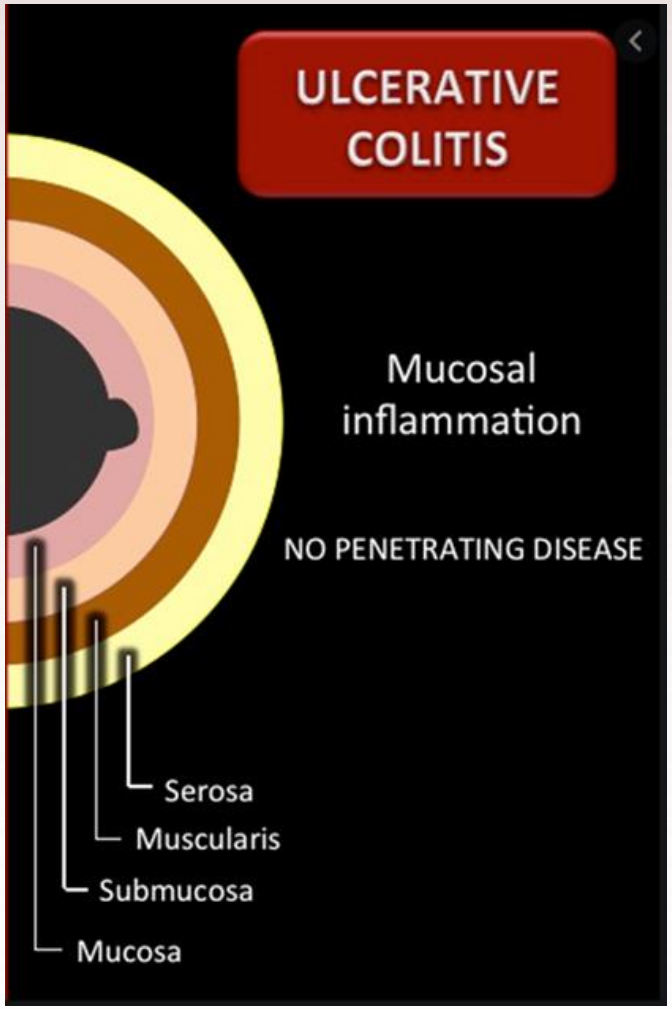






What is Inflammatory Bowel Disease?





Patient RS

24yo male, enjoys playing soccer, works at a movie studio, lives with parents

Recent diagnosis of UC (1 month) – mayo 2 left sided colitis – commenced on 5-ASA and Prednisolone

Presents with confusion, bloody bowel motions, elevated CRP 42, objective fevers, hypotensive, tachycardic – vasovagal in triage

Acute Severe Ulcerative Colitis

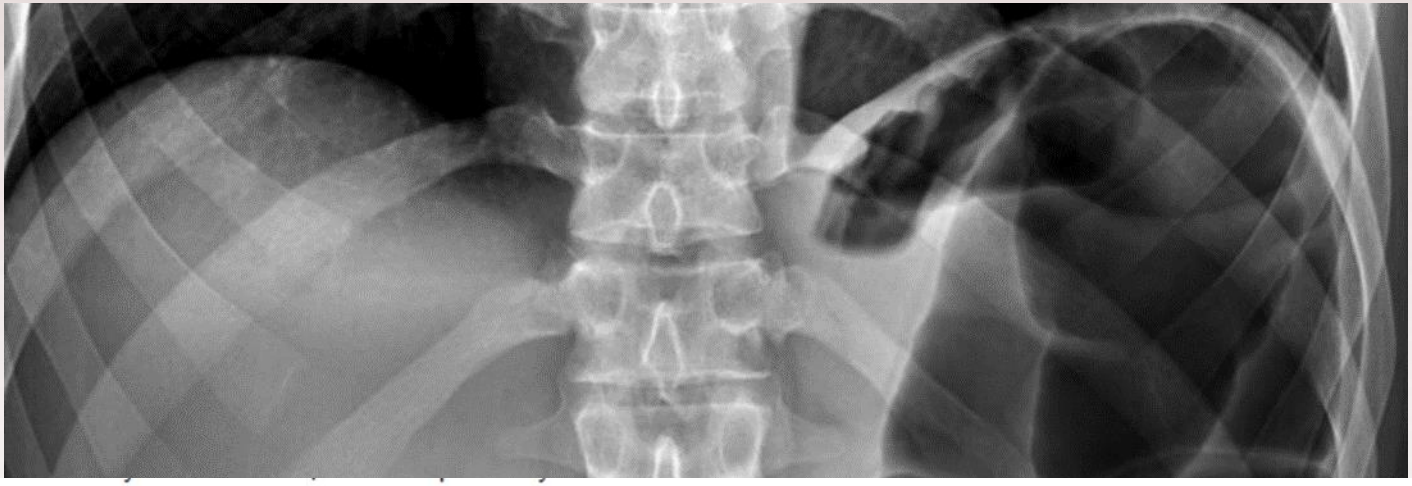
- Medical Emergency in IBD
- 30% chance of colectomy at 30 days
- Predictors of colectomy include:
  - ACE Index (CRP less than 30, CRP more than 50)
  - Biologic failure/refractory patients
  - Toxic Megacolon
- Important to rule out other causes (i.e. infection, NSAID abuse etc.)

	Mild	Moderate	Severe
Bloody stools per day	< 4	4-6	> 6
Pulse	< 90 bpm	⩽ 90 bpm	> 90 bpm
Temperature	< 37.5 ℃	⩽ 37.8 ℃	> 37.8 ℃
Hemoglobin	> 11.5 gm/dL	⩾ 10.5 gm/dL	< 10.5 gm/dL
ESR	< 20 mm/h	⩽ 30 mm/h	> 30 mm/h
CRP	Normal	⩽ 30 mg/dL	> 30 mg/dL

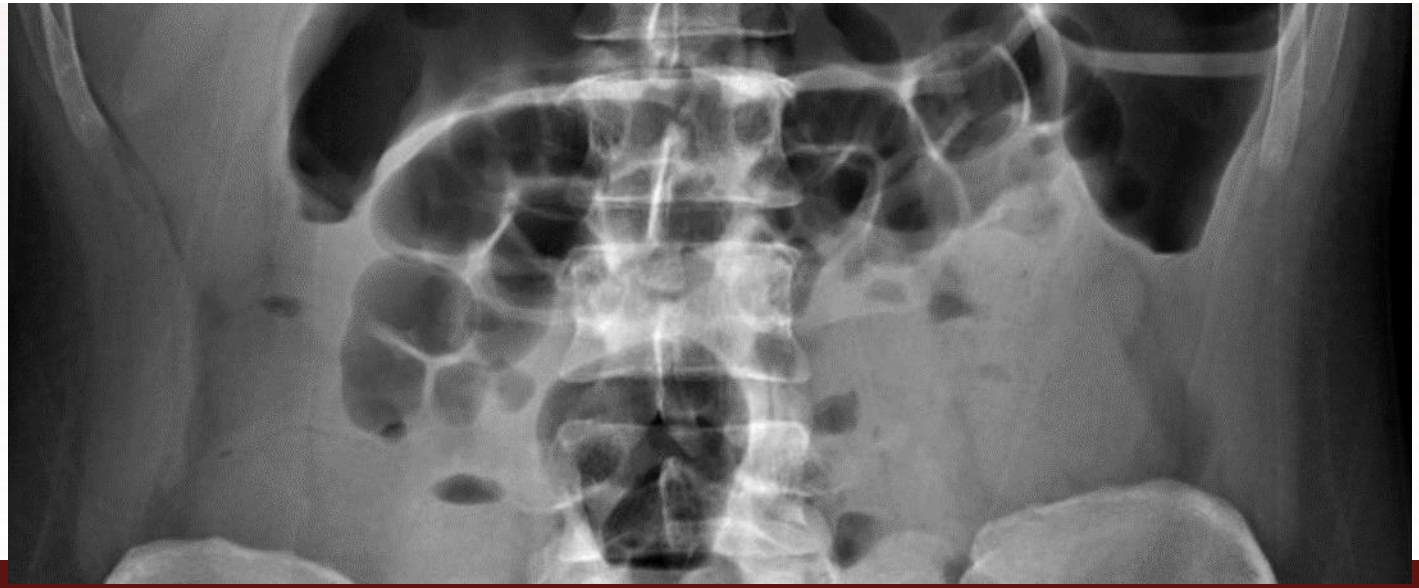
ASUC – ED Management

- Physical Assessment
- Bloods
  - FBC, UEC, LFT, CRP
- Stool Sample
  - C Diff, Ova/Parasites, MCS
- AXR +/- CXR
- Call your friendly Gastroenterologist
- IV Hydrocortisone 100mg QID
- DVT Prophylaxis

ASUC – ED Management



The transverse colon has reduced haustral markings compared to previous radiographs, and demonstrates gaseous dilation up to 85 mm. In the clinical context, toxic megacolon should be considered. Clinical correlation +/- CT assessment would usually be recommended. Note however history of subsequent clinical improvement in April.
No evidence of pneumoperitoneum on the erect view. There are a few short air-fluid levels within non-dilated small bowel, non-specific in appearance.

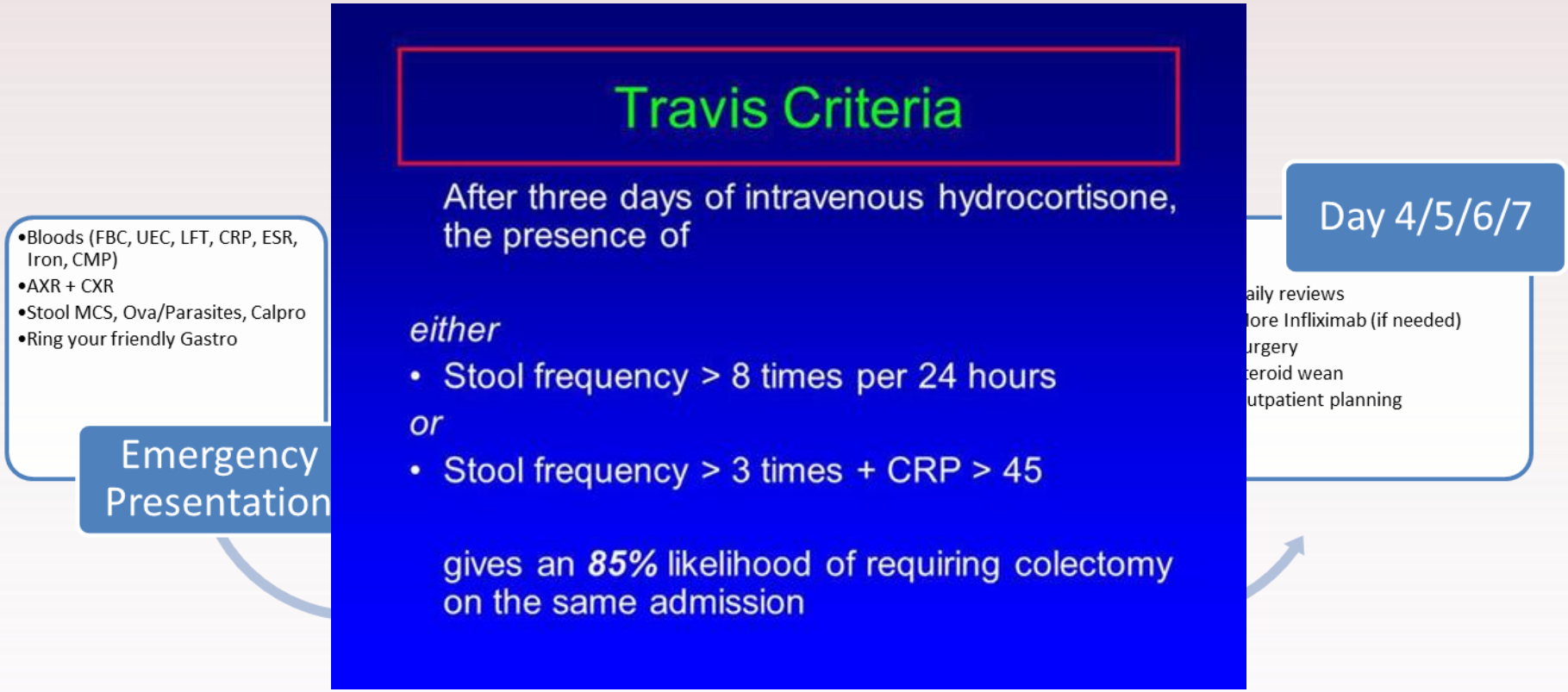


ASUC – Toxic Megacolon

- Jalan's criteria:
  - Colonic dilatation >6cm
  - Any 3 of fever, tachycardia, leukocytosis or anaemia
  - Any 1 of dehydration, altered mental status, electrolyte abnormality

- Risk of severe haemorrhage and perforation
- Before steroid therapy - acute severe UC had a mortality rate of 22-75%
- Mortality in specialist centres today <1%
- Incidence of toxic megacolon in patients with UC is 1-2.5%
- Incidence of toxic megacolon in severe UC who are hospitalised is 5%

ASUC Ward Management

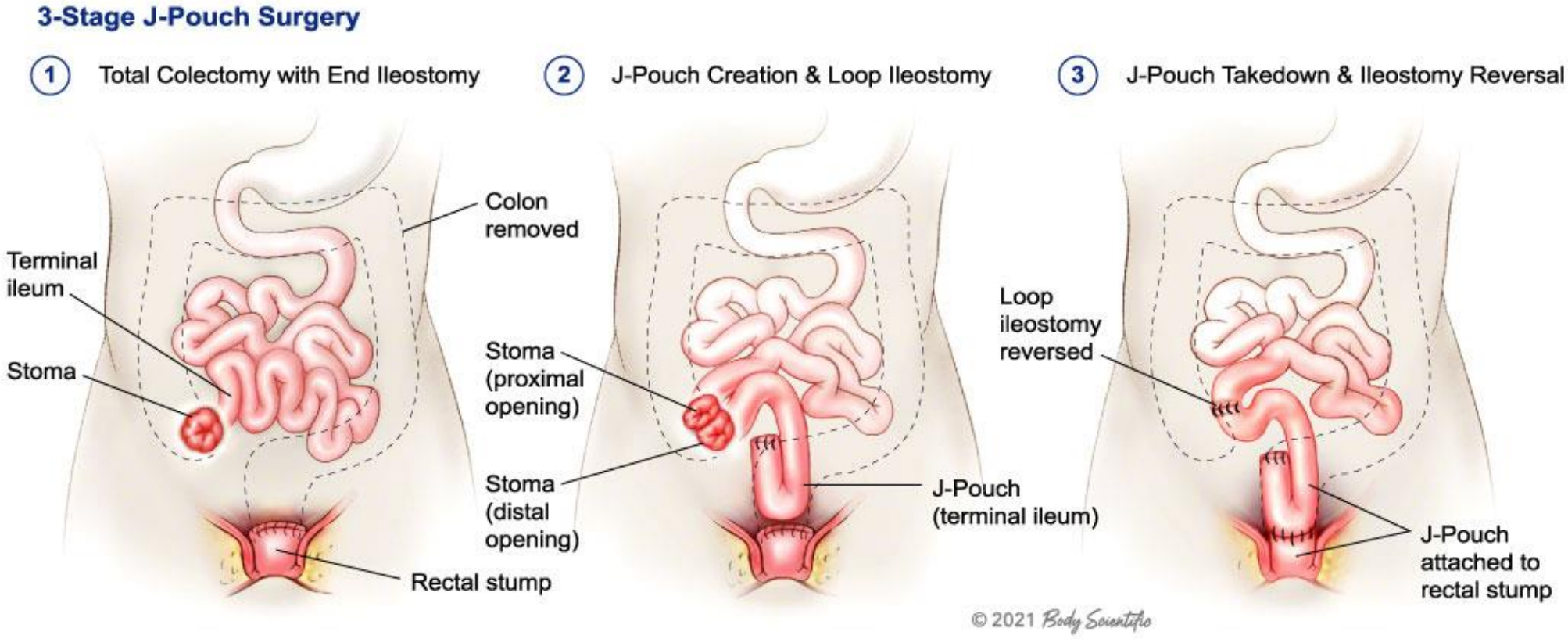


ASUC Ward Management

What can you do as a ward nurse?

- Bowel Chart
- Dietician Referral
- Monitor Temp and HR
- Ensure that daily bloods have been completed
- Ensure DVT prophylaxis
- Support and education

ASUC Surgical Management



Mortality and Morbidity of ASUC

Complication	*N* (% of total complication
Total complications	117 (100%)
Total medical complications	74 (63.2%)
Adverse drug reaction	15 (12.8%)
Thromboembolic[a]	8 (6.8%)
Respiratory infection	7 (6%)
Urinary tract infection	6 (5%)
Systemic and other infections	6 (5%)
Toxic megacolon/perforation	5 (4.3%)
Pancreatitis	3 (2.6%)
Acute renal impairment	3 (2.6%)
Anaemia/iron deficiency	3 (2.6%)
Delirium	3 (2.6%)
Death	2 (1.7%)
Cardiac complications other than myocardial infarction	2 (1.7%)
Deconditioning requiring prolonged rehabilitation	2 (1.7%)
Non-concomitant gastrointestinal infection	2 (1.7%)
Diabetic ketoacidosis	2 (1.7%)
Psychiatric	2 (1.7%)
Bleeding peptic ulcer	1 (0.9%)
Pneumomediastinum	1 (0.9%)
Rectal stumpitis	1 (0.9%)
Total surgical complications	43 (36.8%)
Post-operative ileus	14 (12%)
High stoma output with electrolyte derangement	9 (7.6%)
Abdominal collection requiring IV antibiotics or drainage/reoperation (includes stoma revision, stump blowout, anastomotic leak, bleeding)	7 (6%) 5 (4.3%)
Wound infection	3 (2.6%)
Wound dehiscence	3 (2.6%)
Post-operative bleeding requiring blood products ± return to theatre)	2 (1.7%)

Single Centre – 186 ASUC presentations over 5 years of 152 patients

Prevalence and risk factors for early medical and surgical complications following an admission for acute severe ulcerative colitis

Angel Li, Matthew Coote and Lena Thin

Patient RS

Managed with dose escalated Infliximab x3 in hospital

On 4 weekly, double dose Infliximab as an outpatient

Back playing soccer, working on a movie set on Gold Coast

Met Mark Whalberg

Patient LK

18yo male, enjoys race cars, just started Uni in Communications, lives with parents and younger brother

Recent ED presentation with perianal abscess with surgical drainage and flexible sigmoidoscopy

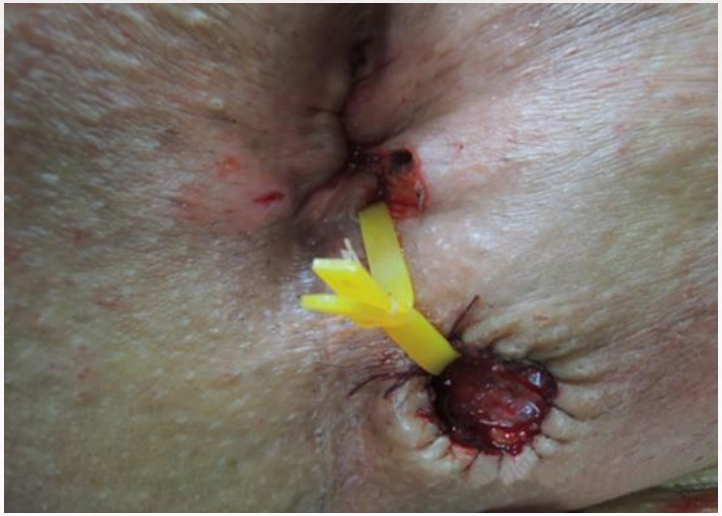
Presents with recurrence of perianal pain, fevers and rigours

Undrained Perianal Sepsis – ED Management

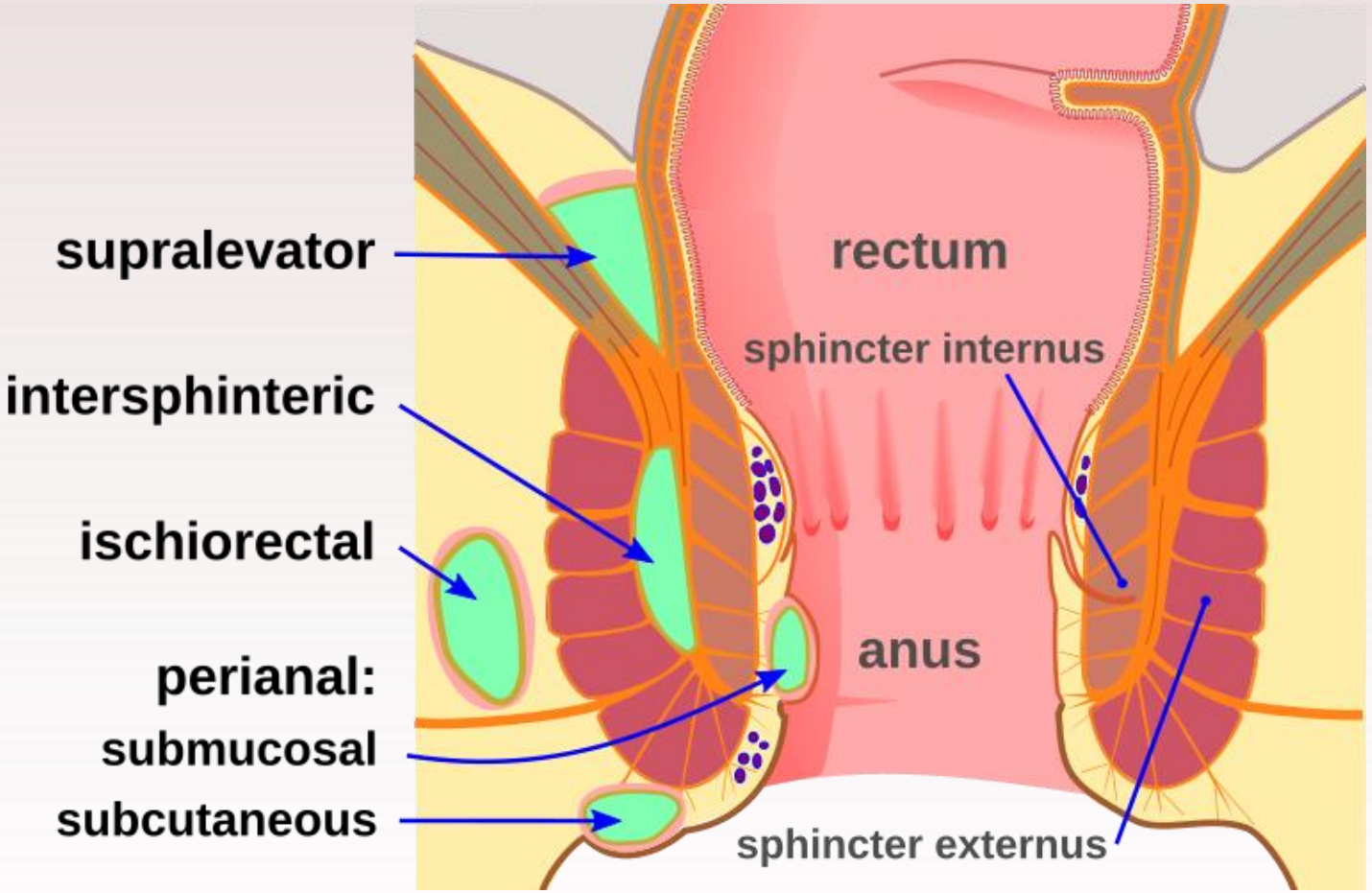
- IBD Emergency – undrained perianal sepsis is a disaster!
- Goal of Emergency management is to drain sepsis

- ED Management
  - Bloods (FBC, UEC, LFT, CRP)
  - IVAB's (Metro +/- Cipro)
  - Surgical Drainage
  - Seton Drain

- As an outpatient, OAB's and Biologics



Perianal Fistula's



Patient LK

Underwent an EUA + drainage of perianal abscess and induced on Infliximab

Back at Uni after having a semester off

Attended Grand Prix with his friends

Patient RO

43yo female, jewellery maker, home with two children and husband

Long standing Ileal Colonic and Perianal Crohn's Disease – poorly adherent to medication

Presents with severe abdominal pain, significant malnourishment (BMI 15), fevers, periotnitic

Acute Abdomen in IBD

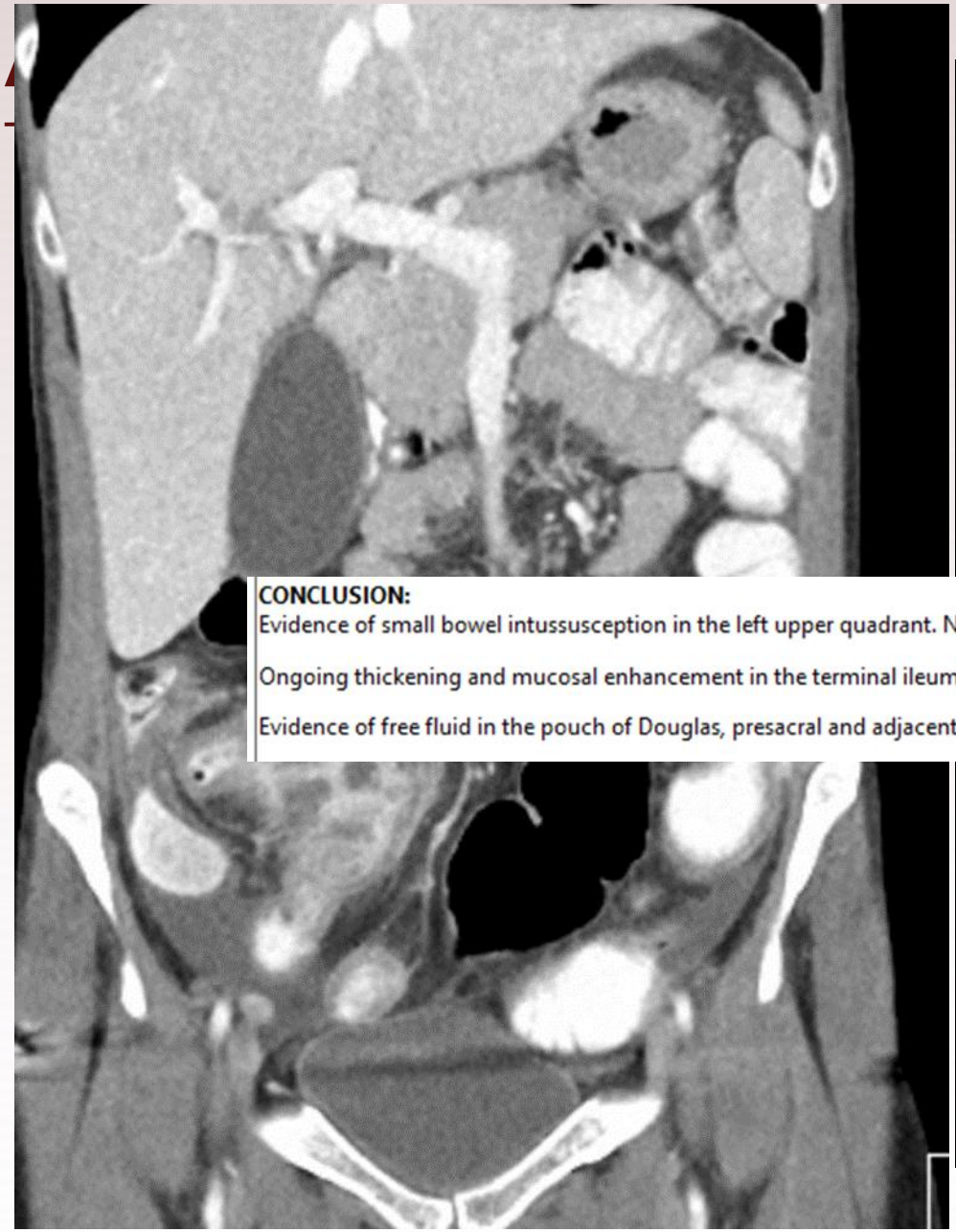
- Crohn's Disease
  - Known Stricturing Disease
  - Known or previous penetrating complications

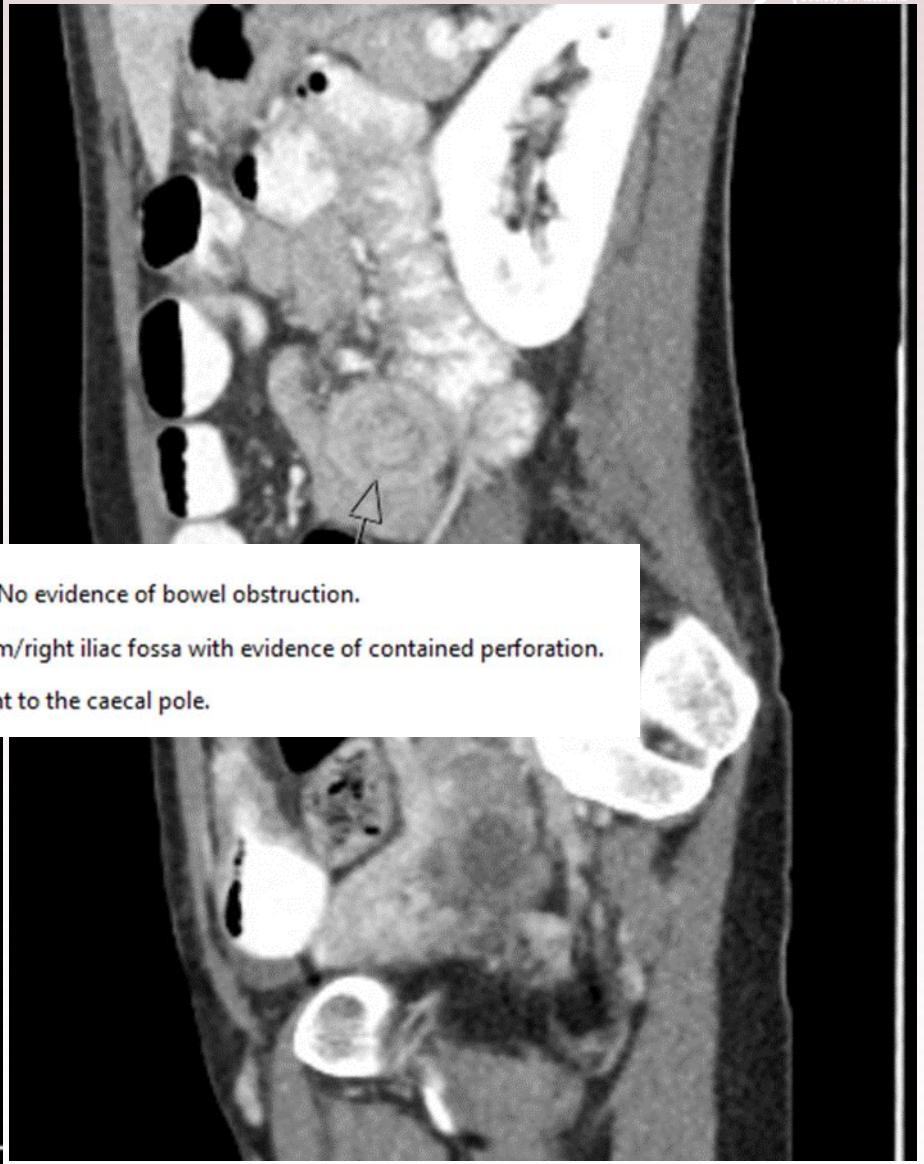
- Is there an obstruction?
- Is there a penetrating complication?

- Is this something else?
  - Functional gut
  - Surgical pathology

Acute Abdomen in IBD

- ED Management
  - CT Abdo +/- Pelvis (contrast)
  - Bloods (FBC, UEC, LFT, CRP, ESR +/- Blood Cultures/septic screen)
  - Call your Gastro +/- Surgeons
  - NGT/IV Fluids (dependent on obstructive symptoms and vomiting)
  - +/- IVAB's (depending on whether patient has a collection
- Ward Management
  - Ongoing review by Gastro/Surgeons
  - ? Surgical intervention
  - EEN / TPN
  - Optimised therapy (IV Hydrocortisone, escalated biologics)
  - Ongoing imaging as required
  - Dietician review





CONCLUSION:

Evidence of small bowel intussusception in the left upper quadrant. No evidence of bowel obstruction.

Ongoing thickening and mucosal enhancement in the terminal ileum/right iliac fossa with evidence of contained perforation.

Evidence of free fluid in the pouch of Douglas, presacral and adjacent to the caecal pole.

Patient RO

Admitted to hospital

On TPN & EEN + IVAB’s

Having daily surgical reviews

Commenced on Upadacitinib

Conclusion

- Overview of IBD
- Outline Acute Severe Ulcerative Colitis
- Outline Perianal Crohn’s patient with undrained Sepsis
- Outline Acute IBD Abdomen
- ED Management + Ongoing inpatient management

Contact

Daniel Lightowler

Clinical Nurse Consultant & Transitional Nurse Practitioner
Inflammatory Bowel Disease Service
Royal Prince Alfred Hospital

E: Daniel.Lightowler@uwa.edu.au