

IBD topics

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IBD topics based on Ms T

- Managing acute UC flare
- Iron deficiency anaemia and IBD (1 slide)
- COVID and IBD
- Diets and IBD
- Colorectal cancer and IBD (2 slides)

IBD treatments

- Steroids
 - Prednisone
 - Budesonide (funded for Crohn's)
 - Cortiment i.e. Budesonide for UC (not funded)
 - Colifoam enema, Proctofoam
- Mesalazine
 - Asacol
 - Pentasa
 - Sulfasalazine
- Immunomodulators
 - Methotrexate (only for Crohn's)
 - Azathioprine
 - Mercaptopurine
 - Thioguanine
- Biologics
 - Infliximab (anti-TNF)
 - Adalimumab (anti-TNF) i.e. Humira, Amgevita (biosimilar)
 - Vedolizumab (anti $\alpha_4\beta_7$) => in 2023!
 - Ustekinumab (anti IL-12 & IL-23) => in 2023!
- Surgery

Ms T

- 25 year old woman with ulcerative colitis (pancolitis)
 - Diagnosed 4 months ago
 - Treated with mesalazine 2g bd
- Fluctuating symptoms for past 6 weeks, trying to manage with diet
- Currently, has 6-7 bloody BM per day
- Obs: T 37.3, BP 110/70, HR 95

Ms T

- You appropriately sent Ms T for blood tests, faecal calprotectin, stool MC&S including C.difficile
- What would be your management?
 - a) Encourage oral fluids + Loperamide + Pentasa enema
 - b) Metronidazole
 - c) Prednisone
 - d) Send e-Referral for urgent Gastro OP review

Ms T

- 25 year old woman with ulcerative colitis
 - 6-7 bloody BM per day for past 6 weeks
 - Obs: T37.3, BP 110/70, HR 95
- Blood tests
 - Hb 100, platelets 400, WCC 9
 - Na 140, K 3.4, urea 6.7, Cr 80
 - CRP 40
 - Ferritin 5
- What would be your management?
 - a) Oral iron replacement
 - b) Organise Ferinject
 - c) Send an updated e-Referral for urgent Gastro OP review
 - d) Refer to local hospital for inpatient management

Truelove & Witts criteria for acute severe ulcerative colitis (ASUC)

- > 6 bloody BM per day

PLUS

- 1 or more of the following
 - T >37.8
 - HR >90
 - Hb <105
 - ESR >30 (often substitute with CRP)

- Ms T

- 6-7 bloody BM per day
- T 37.3
- HR 95
- Hb 100
- CRP 40

Acute severe ulcerative colitis (ASUC)

- Is a life threatening emergency
- Greater the number of clinical criteria associated with >6 episodes of bloody diarrhoea, the higher the chance of patient requiring colectomy would be

Truelove e Witts criteria Diarrhea with blood: >6 episodes/day + <ul style="list-style-type: none">• Heart rate: > 90 bpm;• Temperature: > 37.8° C;• Hemoglobin: < 10.5 g/dl• Erythrocyte sedimentation rate: > 30 mm/h	Colectomy rate (n = 294 hospitalizations)
+ 1	9% (11/129)
+ 2	31% (29/94)
+ 3	48% (29/60)
+ 4	45% (5/11)

From The pattern and outcome of acute severe colitis. J Crohns Colitis 2010

Ms T

- Stool specs negative
- AXR excluded toxic megacolon
- Flexible sigmoidoscopy: Mayo 3 colitis up to transverse colon at least
- Suboptimal response to IV hydrocortisone
- Rescue therapy with Infliximab
- Discharged with
 - Tapering course of prednisone
 - Mercaptopurine 50mg daily
 - Infliximab dose at weeks 2 and 6 planned

Mayo endoscopic score for ulcerative colitis

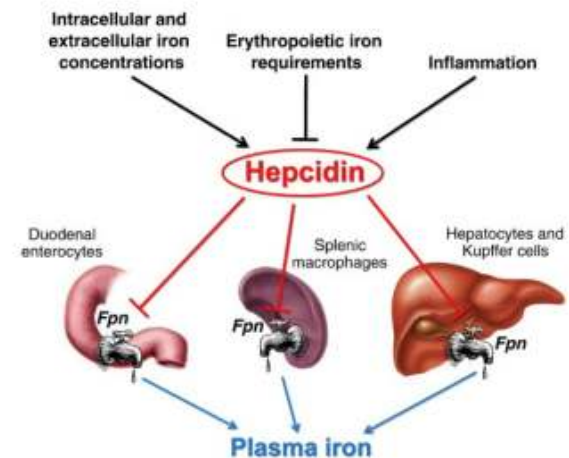


Ms T

- Which of the following would you recommend for this patient?
 - a) Yearly flu vaccination
 - b) COVID vaccination(s)
 - c) 5 yearly pneumococcal vaccination
 - d) Regular pap smear
 - e) All the above

Iron deficiency anaemia and IBD

- All IBD patients should be screened for iron deficiency annually (ECCO guidelines)
 - FBC, ferritin, CRP
- Pathogenesis
 - Increased iron loss from active bleeding & epithelial desquamation
 - Reduced dietary iron intake from dietary changes
 - Reduced iron transport to blood due to inflammation induced high hepcidin concentration
 - Impaired erythropoiesis due to inflammation
- Management
 - Active IBD or intolerant of oral iron => IV iron
 - In remission or quiescent disease => oral iron



COVID and IBD

- Ms T tested positive for COVID => started on Paxlovid (symptom onset 2 days ago)
 - UC under control on Mesalazine and Mercaptopurine
- What do you do with her UC medications?
 - a) Continue with both
 - b) Stop both
 - c) Continue with Mesalazine but stop 6-MP
 - d) Ring Gastro for advice

COVID and IBD

- COVID pandemic has raised a number of concerns about IBD patients, especially those on immunosuppressive therapies
 - Are they at an increased risk of acquiring COVID?
 - Do they develop worse outcomes following COVID?
 - Do they have suboptimal vaccine response compared with the general population?

COVID and IBD

Review > Gut. 2022 Jul;71(7):1426-1439. doi: 10.1136/gutjnl-2021-326784. Epub 2022 Apr 27.

Recent advances in clinical practice: management of inflammatory bowel disease during the COVID-19 pandemic

Simeng Lin ^{# 1 2}, Louis Hs Lau ^{# 3}, Neil Chanchlani ^{# 1 2}, Nicholas A Kennedy ^{1 2},
Siew C Ng ^{4 5 6}

COVID and IBD

- Are they at an increased risk of acquiring COVID?
 - **No, their COVID risk is not increased**
 - **Pooled incidence rate per 1000 population: 4.02 in IBD patients; 6.59 in general population** in a meta-analysis including 17 studies (Singh et al. United European Gastroenterol J 2021; 9:158-76)
- International guidelines recommend COVID vaccination for all IBD patients on immunosuppressive therapies
- Recommend continuing with all IBD medications if patient not infected

COVID and IBD



Hospitalisations



ICU admissions/Severe Covid



Mortality



	Hospitalisations	ICU admissions/Severe Covid	Mortality
Systemic steroids	RR 1.99 [95%CI 1.64 - 2.40]*	RR 3.41 [95%CI 2.28 - 5.11]*	RR 2.70 [95%CI 1.61 - 4.55]*
Immunomodulators	RR 0.89 [95%CI 0.37 - 2.10]	RR 0.71 [95%CI 0.17 - 3.02]	RR 1.18 [95%CI 0.23 - 6.01]
5-ASA	RR 1.02 [95%CI 0.83 - 1.26]	RR 1.03 [95%CI 0.74 - 1.43]	RR 1.09 [95%CI 0.65 - 1.82]
JAK-inhibitors	RR 0.48 [95%CI 0.30 - 0.76]*	RR 0.50 [95%CI 0.14 - 1.86]	RR 0.83 [95%CI 0.10 - 7.11]
Anti-TNF	RR 0.58 [95%CI 0.50 - 0.69]*	RR 0.50 [95%CI 0.33 - 0.78]*	RR 0.44 [95%CI 0.26 - 0.76]*
Anti-integrin	RR 0.66 [95%CI 0.56 - 0.78]*	RR 0.72 [95%CI 0.42 - 1.24]	RR 0.50 [95%CI 0.32 - 0.78]*
IL12/23 inhibitor	RR 0.44 [95%CI 0.36 - 0.54]*	RR 0.43 [95%CI 0.26 - 0.71]*	RR 0.55 [95%CI 0.28 - 1.11]

From Recent advances in clinical practice: management of inflammatory bowel disease during COVID-19 pandemic. Gut 2022

COVID and IBD

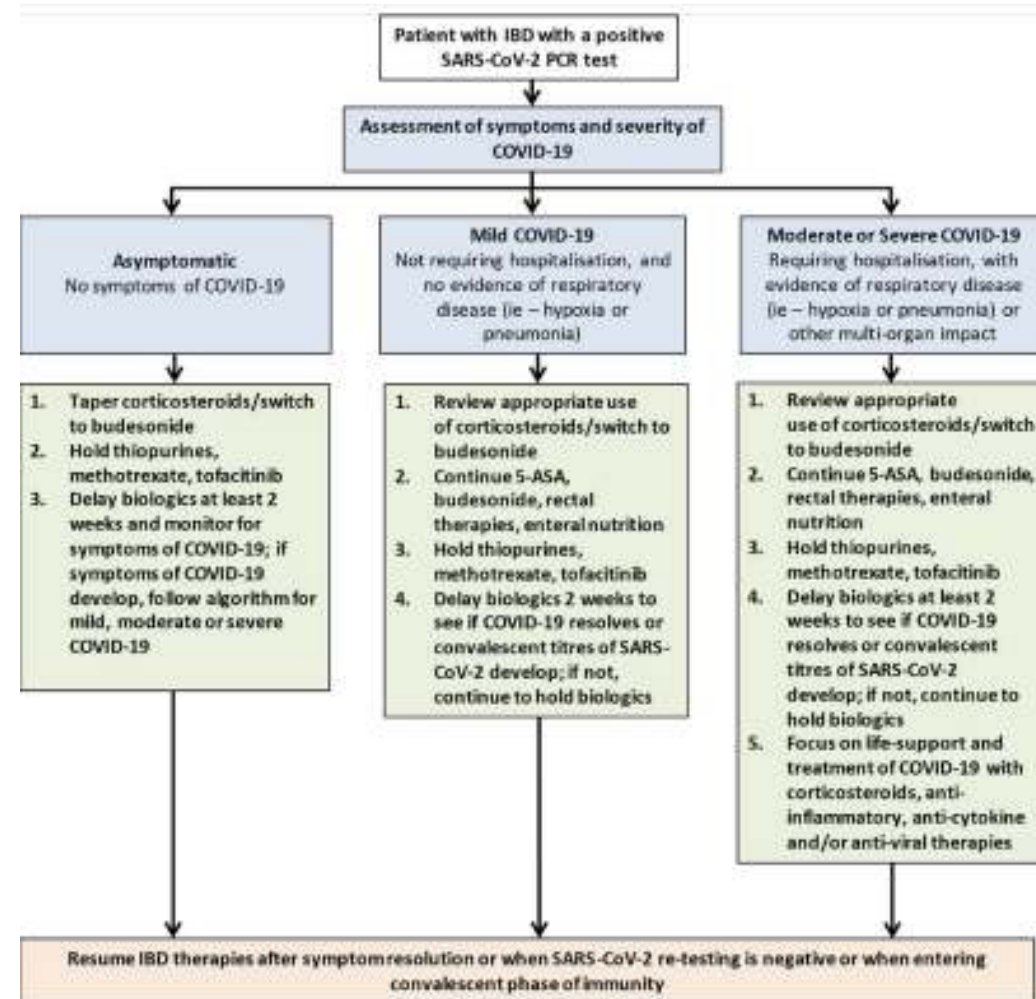
- **Do they develop worse outcomes following COVID?**
 - **They have largely similar outcomes including hospitalisation, ICU admission & mortality compared with the general population**
 - **Risk factors for adverse outcomes following COVID in IBD patients**
 - **Older age**
 - **Increase number of co-morbidities**
 - **Corticosteroid use**
 - **6.9 fold risk of severe COVID & 11.6 fold risk of death due to COVID (SECURE-IBD registry)**
 - **Active IBD**

COVID and IBD

- Do they have suboptimal vaccine response compared with the general population?
 - Vaccine response may be attenuated when receiving
 - Systemic corticosteroids
 - Anti-TNF monotherapy
 - Combination therapy i.e. anti-TNF plus immunomodulator

COVID and IBD

- International Organisation for Study of IBD recommends that
 - Asymptomatic COVID +ve pts
 - Withhold IBD therapies for minimum 10 days
 - Symptomatic COVID +ve pts
 - Withhold IBD therapies
 - Restart at least 72 hrs since recovery and at least 10 days since symptoms first appear



From Recent advances in clinical practice: management of inflammatory bowel disease during COVID-19 pandemic. Gut 2022

COVID and IBD

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Diet and IBD

- Ms T comes to see you for a gynae issue but also asks you for advice about diets for patients with IBD.
- What diet would you recommend Ms T?
 - a) Low FODMAP diet
 - b) Low residue diet
 - c) Gluten free diet
 - d) Mediterranean diet
 - e) Exclusive enteral nutrition

Disclaimer:
Formal dietician review
recommended!

Low FODMAP diet and IBD

- IBS type symptoms are reported in up to 50% of IBD patients **in remission**
 - Normal faecal calprotectin or colonoscopy
- Can be helpful in IBD patients with concurrent IBS type symptoms



Low residue diet and IBD

- Designed to reduce stool amount & frequency
- Example:
 - White bread
 - Non wholegrain cereals e.g. cornflakes
 - White rice, refined pasta, noodles
 - Cooked vegetables (no skin, seeds or stalks)
 - Lean meat, fish, eggs, tofu
- Recommended during flare of IBD
 - UC or Crohn's flare
 - Obstructive symptoms in Crohn's

Low residue menu options



- White bread

- White rice

- White pasta

- Pretzels

- Yogurt

- Cottage cheese

- Chicken (no skin)

- Deli turkey

- White fish (tilapia)

- Eggs

- Bananas

- Apple sauce

- Canned fruit

- Peaches, pears

- Cooked vegetables

- Carrots, broccoli



No whole grains, nuts, seeds, or foods with skins

Gluten free diet and IBD

- Recommended if patient has coeliac disease
- Some patients report reduction in symptoms on GFD
- No evidence that GFD induces remission in IBD



Mediterranean diet and IBD

- High consumption
 - Vegetables: ≥ 2 servings per meal
 - Fruits : ≥ 2 servings per meal
 - Breads & cereals: 1-2 servings per meal
 - Olive oil: every meal
 - Dairy foods: 2 servings daily
- Moderate consumption
 - Legumes: ≥ 2 servings per week
 - Fish/seafood: ≥ 2 servings per week
 - Eggs: 2-4 servings weekly
 - Poultry: 2 servings weekly
- Low consumption
 - Red meat: <2 servings per week
 - Sweets: <2 servings per week



Mediterranean diet and IBD

Clinical Trial > Inflamm Bowel Dis. 2021 Jan 1;27(1):1-9. doi: 10.1093/ibd/izaa097.

Multidimensional Impact of Mediterranean Diet on IBD Patients

Fabio Chicco¹, Salvatore Magri¹, Arianna Cingolani¹, Danilo Paduano¹, Mario Pesenti¹, Federica Zara¹, Francesca Tumbarello¹, Emanuela Urru¹, Alessandro Melis¹, Laura Casula¹, Massimo Claudio Fantini¹, Paolo Usai¹

- 142 IBD patients (84 UC, 58 CD) on Mediterranean diet for 6 months
- Improvement in BMI, waist circumference, liver steatosis grade on USS & QOL
- Less UC & CD patient with stable therapy had active disease & raised inflammatory markers
 - UC: 23.7% pre diet, 6.8% post diet (p=0.004)
 - CD: 17.6% pre diet, 3% post diet (p=0.011)



Mediterranean diet and IBD

> Gut. 2020 Sep;69(9):1637-1644. doi: 10.1136/gutjnl-2019-319505. Epub 2020 Jan 3.

Adherence to a Mediterranean diet is associated with a lower risk of later-onset Crohn's disease: results from two large prospective cohort studies

Hamed Khalili ^{1 2}, Niclas Håkansson ³, Simon S Chan ^{4 5}, Ye Chen ⁶, Paul Lochhead ⁷, Jonas F Ludvigsson ^{8 9}, Andrew T Chan ^{10 11}, Andrew R Hart ¹², Ola Olén ¹³, Alicja Wolk ¹⁴

[J Inflamm Res](#), 2022; 15: 2075–2086. Published online 2022 Mar 29. doi: [10.2147/JIR.S349502](#)

PMCID: PMC8994055 | PMID: [35411169](#)

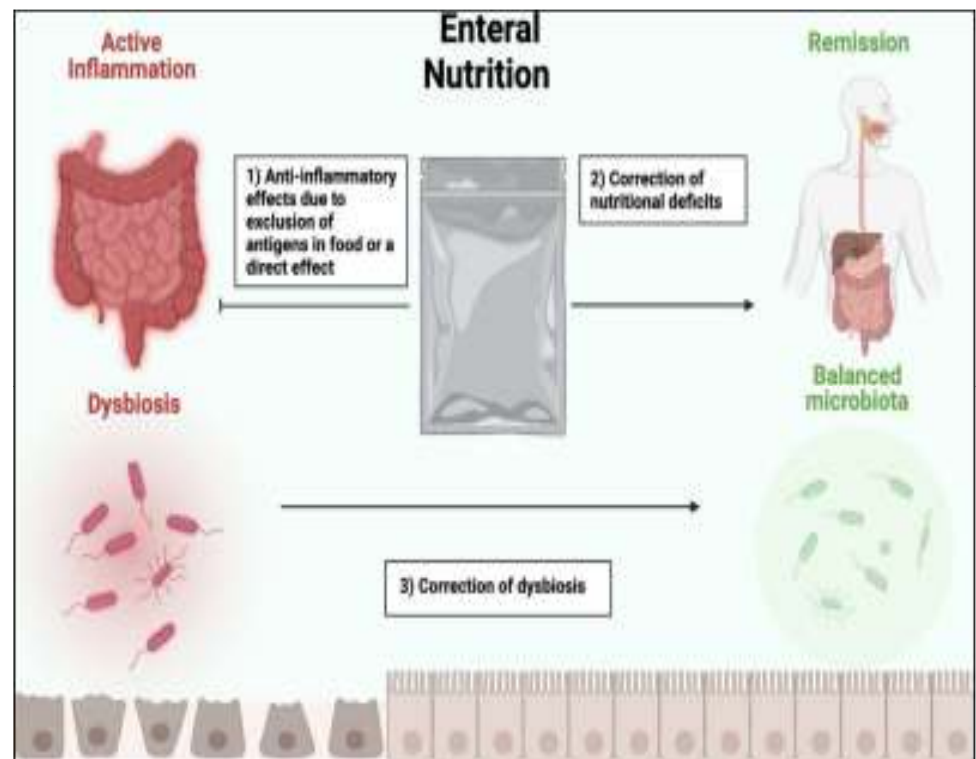
Adherence to the Mediterranean Diet Improved Clinical Scores and Inflammatory Markers in Children with Active Inflammatory Bowel Disease: A Randomized Trial

[Doaa El Amrousy](#), ¹ [Heba Elashry](#), ² [Abeer Salamah](#), ³ [Sara Maher](#), ⁴ [Sherief M Abd-Elsalam](#), ² and [Samir Hasan](#) ¹



Exclusive enteral nutrition and IBD

- Formula based diet i.e. no solid foods
 - 100% individual's nutritional requirements met via liquid nutrition formula (PO or NG)
- Recommended 1st line induction therapy for children with CD with comparable efficacy to steroids
- Also works in adults with CD (small studies)
 - Pre-op EEN shown to reduce post-op complications & recurrence
- Disadvantage: poor adherence



From Review of exclusive enteral therapy in adult Crohn's Disease. BMJ Open Gastroenterol 2021

Colorectal cancer and IBD

Ms T comes to see you again for vertigo and asks you this unrelated question.

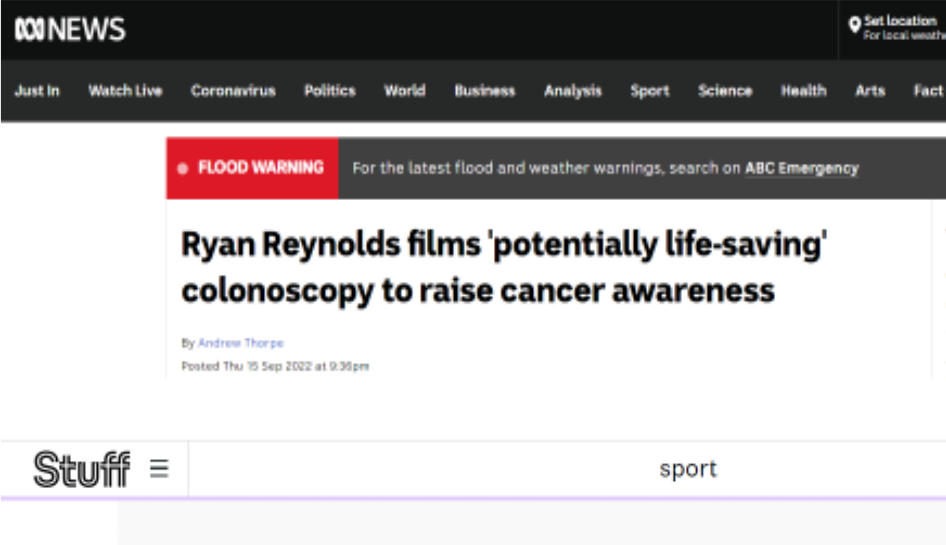
Do I need regular colonoscopies?

a) Ask your gastroenterologist

b) Start bowel screening from 60

c) From time of diagnosis

d) 8 years after diagnosis



The screenshot shows the ABC News website interface. At the top, there is a navigation bar with the ABC NEWS logo and a 'Set location' button. Below the navigation bar, there is a 'FLOOD WARNING' banner. The main headline reads: 'Ryan Reynolds films 'potentially life-saving' colonoscopy to raise cancer awareness'. The article is by Andrew Thorpe and was posted on Thursday, 10 September 2022 at 9:35pm. Below the headline, there is a 'Stuff' menu and a 'sport' category link.

America's Cup star Dean Barker reveals bowel cancer diagnosis

Stuff sports reporters · 21:45, Sep 11 2022



Colorectal screening in IBD

- Colonoscopy is the recommended method of screening
- CRC risk for Crohn's colitis and UC are similar => start screening colonoscopy 8 years after diagnosis
 - Screening / surveillance colonoscopy not required for ileal Crohn's & ulcerative proctitis
- Repeat surveillance colonoscopies at 1-5 year intervals
- Patients with Crohn's colitis or UC PLUS **primary sclerosing cholangitis** should have a screening colonoscopy **at the of diagnosis** and **annual surveillance colonoscopy** subsequently

Take home messages

- ASUC => Truelove and Witts criteria
- Iron deficiency anaemia => IV iron for active IBD
- COVID and IBD => vaccinate, continue if no COVID, possibly withhold if COVID positive
- Diets and IBD => low residue diet during flares, Mediterranean diet
- Colorectal cancer

Questions?