# UCSF Colitis and Crohn's Disease Center Town Hall: IBD and Aging



### Agenda

630-640 pm: Updates

640-710 pm: IBD and Aging

710-730 pm: Wrap up and Questions

### Notes:

- You can ask a question anonymously or use or name
- You can upvote questions that are interesting to you

# COVID

### **COVID AT UCSF**

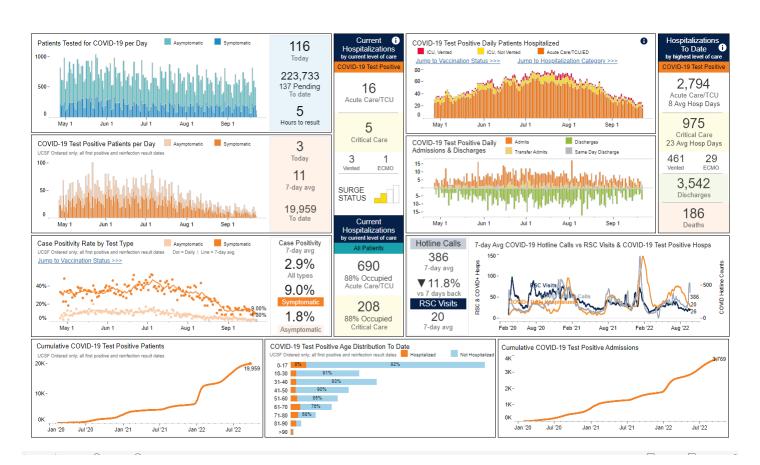


Table 2. Immunization Schedule for Persons 18 Years of Age

### **<u>Bivalent</u>** target two strains of COVID-19:

- original strain (2020)
- Omicron subvariants BA.4 and BA.5

#### **Recommend:**

 Bivalent vaccine >2 months after infection/booster

Туре	Recipient Age	Product*	For Most People		Those Who ARE Moderately or Severely Immunocompromised	
			Doses	Interval Between Doses†	Doses	Interval Between Doses
mRNA vaccine	18 years and older	MONOVALENT Moderna Red vial cap with a blue-bordered label	Primary series: Monovalent			
			Dose 1 to 2	At least 4–8 weeks <sup>‡</sup>	Dose 1 to 2	At least 4 weeks
					Dose 2 to 3	At least 4 weeks
		BIVALENT Moderna Blue cap with gray bordered label	Booster dose: Bivalent			
			Dose 2 to 3	At least 8 weeks (2 months)	Dose 3 to 4	At least 8 weeks (2 months)
	18 years and older	MONOVALENT Pfizer-BioNTech Gray vial cap with gray-bordered label	Primary series: Monovalent			
			Dose 1 to 2 At least weeks‡	At least 3-8	Dose 1 to 2	At least 3 weeks
				weeks*	Dose 2 to 3	At least 4 weeks
		BIVALENT Pfizer-BioNTech: Gray vial cap with gray-bordered label	Booster dose: Bivalent			
			Dose 2 to 3	At least 8 weeks (2 months)	Dose 3 to 4	At least 8 weeks (2 months)
Protein subunit vaccine	12 years and older	MONOVALENT Novavax	Primary series: Monovalent			
			Dose 1 to 2	At least 3–8 weeks‡	Dose 1 to 2	At least 3 weeks
		Moderna or Pfizer-BioNTech bivalent COVID-19 vaccine should be used for the booster dose.	Booster dose: Bivalent			
			Dose 2 to 3	At least 8 weeks (2 months)	Dose 2 to 3	At least 8 weeks (2 months)
Adenovius vector vaccine	18 years and older	MONOVALENT Janssen	Janssen COVID-19 vaccine is authorized for use in certain limited situations due to safety considerations. §			
		Moderna or Pfizer-BioNTech bivalent COVID-19 vaccine should be used for the booster dose.	Booster dose: Bivalent			
			Administer a single booster dose at least 8 weeks (2 months) after the previous dose.			

https://www.cdc.gov/vaccines/covid-19/downloads/COVID-19-immunization-schedule-ages-5yrs-older.pdf accessed 9/22/22

### **Treatment and Prevention**

Treatment	Who	When	How
Nirmatrelvir with Ritonavi (Paxlovid) [2] Antiviral	Adults; children 12 years and older	Start as soon as possible; must begin within 5 days of when symptoms start	Taken at home by mouth (orally)

- Evusheld: (tixagevimab plus cilgavimab) adults and children ages >12 years
- Two monoclonal antibodies provided together
  - 2 separate consecutive intramuscular (IM) injections at office or healthcare facility
- Moderately or severely immunocompromised or severely allergic to COVID-19 vaccines
  - High dose long-term steroids, combination biologics
  - No antibody response to COVID vaccine

#### **Evusheld**:

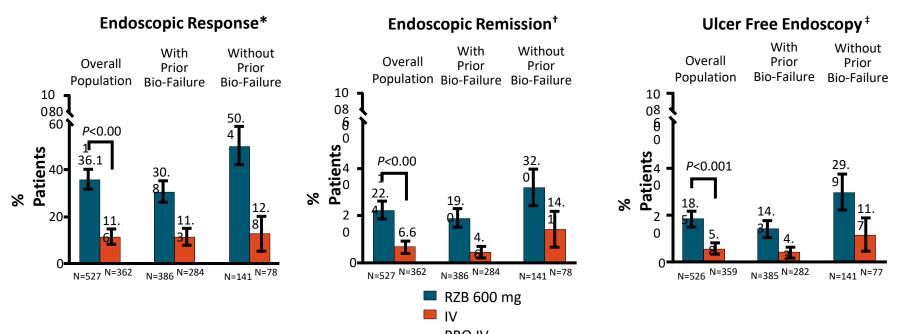
 Undetectable covid Ab despite vaccine

#### Paxlovid:

- Trial was in unvaccinated
- Recommended in older patients, immune compromised

# New Therapy

### Risankizumab: Moderate to severe Crohn's Disease **Induction Endoscopic Outcomes at Week 12**



<sup>\*</sup>Endoscopic response defined as >50% decline in SES-CD vs BL by central reviewer for in pts with SES-CD of 4 at BL,  $\geq$ 2-point decrease vs BL)

Ferrante, ECCO 2022, Abstr OP25,

Slide credit: clinicaloptions.com

<sup>†</sup>Endoscopic remission defined as SES-CD ≤4 with ≥2-point decrease vs BL, and no subscore ≥2 for any variable by central reviewer

<sup>\*</sup>Ulcer-free endoscopy defined as SES-CD ulcerated surface subscore of 0 in pts with BL subscore ≥1 by central reviewer

### **Medications**

Crohns Disease	Ulcerative Colitis		
	Mesalamine		
Budesonide (entocort)	Budesonide (uceris)		
Azathioprine/6mp/MTX	Azathioprine/6mp/MTX		
<ul> <li>Biologics:</li> <li>Anti-TNF: Infliximab, adalimumab, certolizumab</li> <li>Anti-Integrin: Vedolizumab, natalizumab</li> <li>Anit-IL12: Ustekinumab, Risankizumab</li> </ul>	<ul> <li>Biologics:</li> <li>Anti-TNF: Infliximab, golimumab, adalimumab</li> <li>Anti-Integrin: Vedolizumab</li> <li>Anti-IL23: Ustekinumab</li> </ul>		
Jak inhibitors: none	Jak inhibitors:  Tofacitinib  Upadacitinib		
	S1P: Ozanimod		

# IBD Chat



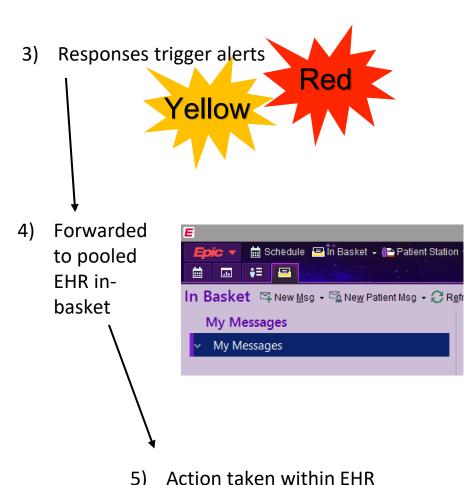
Notification sent via text/email

Patient enrolls and begins interacting with chat

### Modules

- i. Housekeeping
- ii. SymptomMonitoring: HBI/SCCAI score
- iii. Lab Reminders
- iv. Goodbye





Slide courtesy of Rishika Chugh MD

### **IBD** Chat

- Expedited Chat (skip a month)
- Videos (drug therapy, pregnancy, older patients, pediatrics, pregnancy, etc)
- Flowsheets in mychart

# IBD Clinical Trials

### Clinical Trials

- MOSAIC: Outpatient IV steroids for severe ulcerative colitis
- Diet (Seamus) intervention for mild to moderate ulcerative colitis
- PIANO Registry: Pregnancy and IBD (piano@ucsf.edu)

### Coming soon:

- Combination therapy
- Oral molecules

• Contact: Karan Bhatia: Karan.Bhatia@ucsf.edu



# IBD and the Elderly

UCSF IBD Town Hall

September 28, 2022

Kendall Beck, MD

# Objectives

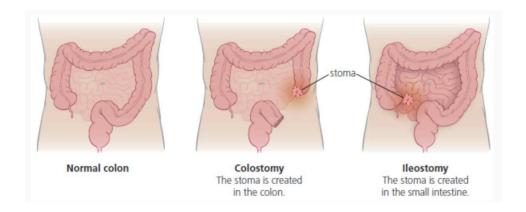
- Case presentation
- IBD demographics
- Making the diagnosis of IBD in an elderly patient
- Treatment considerations for elderly patients
  - Medical
  - Surgical
- Healthcare maintenance topics
- Recently published IBD and elderly care pathway



# Case presentation

- 78 yo W with Crohn's disease, diagnosed in 1985 who had a colectomy (colon removed) and ileostomy
- Admitted to hospital with diarrhea, kidney injury, abnormal heart rhythm, and partial bowel blockage after taking antidiarrheal agents
- Has not been on any Crohn's medicines, or seen by gastroenterologist in 7 years.





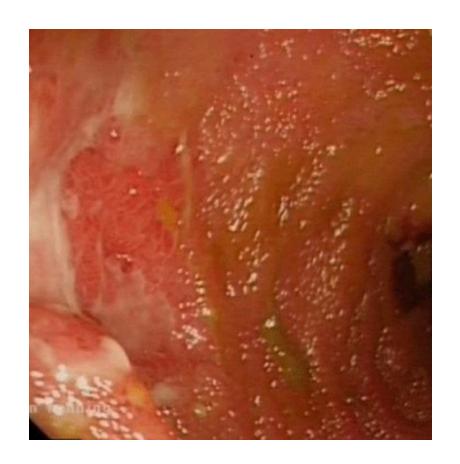


# Case presentation

 Last time she had her bowel looked at was an ileoscopy in 2011 with very mild inflammation

### Hospital:

- Fecal calprotectin (stool inflammation test) recommended
   □ 405 (normal < 150)</li>
- Due to hesitancy to undergo procedure, and partner's medical issues, ileoscopy was done 11 months later
  - Inflammation with ulcers in the ileum, consistent with active
     Crohn's disease of the ileum →

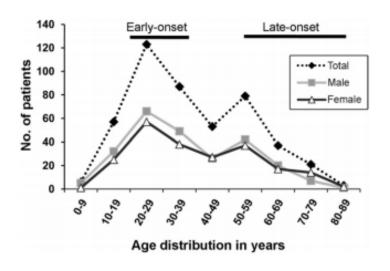




# Demographics, Diagnosis, & Prognosis



# Demographics



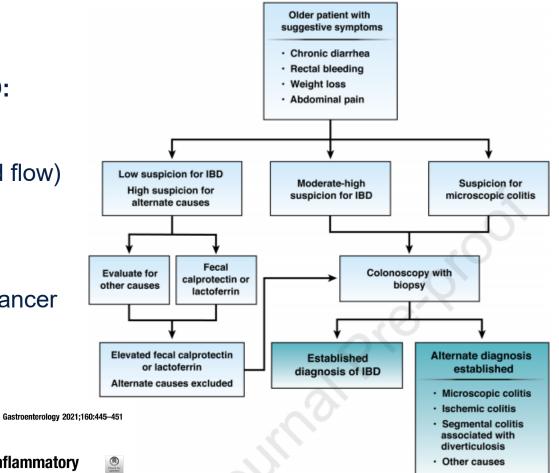
- Elderly defined as > age 60
- 1/160 elderly people have IBD (new diagnoses, and aging IBD population)
- Bimodal distribution of IBD diagnoses
- ~15% of new IBD diagnoses are made in the elderly
- Elderly patients comprise very small portion of clinical trials subjects or pharmcovigilance data



# Diagnosis of IBD in elderly

### **Elderly less likely to have IBD:**

- Colorectal cancer
- Ischemic colitis (lack of blood flow)
- **Diverticulitis**
- Ibuprofen changes
- Radiation colitis (from prior cancer therapy)
- Microscopic colitis



AGA Clinical Practice Update on Management of Inflammatory **Bowel Disease in Elderly Patients: Expert Review** 

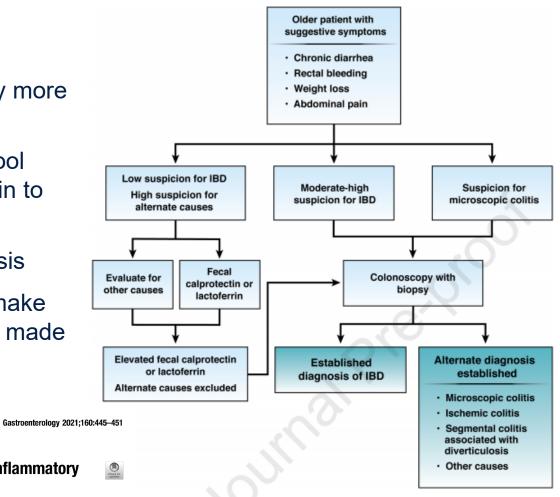


Ashwin N. Ananthakrishnan, Geoffrey C. Nguyen, and Charles N. Bernstein



# Diagnosis of IBD in elderly

- Procedures and anesthesia carry more risk in elderly
- Diagnostic tests: blood count, stool test for infection, fecal calprotectin to confirm inflammation
- CT scan to rule out other diagnosis
- Colonoscopy only if other tests make IBD likely, or the diagnosis is not made by the other tests



AGA Clinical Practice Update on Management of Inflammatory Bowel Disease in Elderly Patients: Expert Review

Ashwin N. Ananthakrishnan, Geoffrey C. Nguyen, and Charles N. Bernstein



# Expected course of disease

Elderly (> 50) with new onset IBD are more likely to have...

- Only the colon involved in Crohn's Disease (44%)
  - Elderly less likely to have perianal Crohn's, abscess, fistula
- Left sided ulcerative colitis (rather than whole colon) (40%)
- Less severe
- Better outcomes suggested by some studies, but not all
  - Fewer older onset IBD given biologic drugs
  - Similar need for surgery for CD, more UC pts had surgery

**Original Article** 

Systematic Review and Meta-analysis: Phenotype and Clinical Outcomes of Older-onset Inflammatory Bowel Disease



Ashwin N. Ananthakrishnan, a,\*,† Hai Yun Shi,b,† Whitney Tang,b Cindy C. Y. Law,c Joseph J. Y. Sung,b Francis K. L. Chan,b Siew C. Ngb,\*



# Expected course of disease

Elderly (> 60) with new onset IBD are...

- More likely to have stricture pattern for Crohn's (24 vs 13%)
- Less likely to use steroids, advanced drugs like anti-TNF
- More hospitalization (66 vs 49%)
- More cancers (14 vs 0.5%)
- More surgery for UC (8.3 vs 5.1%)
  - ?due to less medication use

More important to consider individual disease rather than trends when determining management strategies



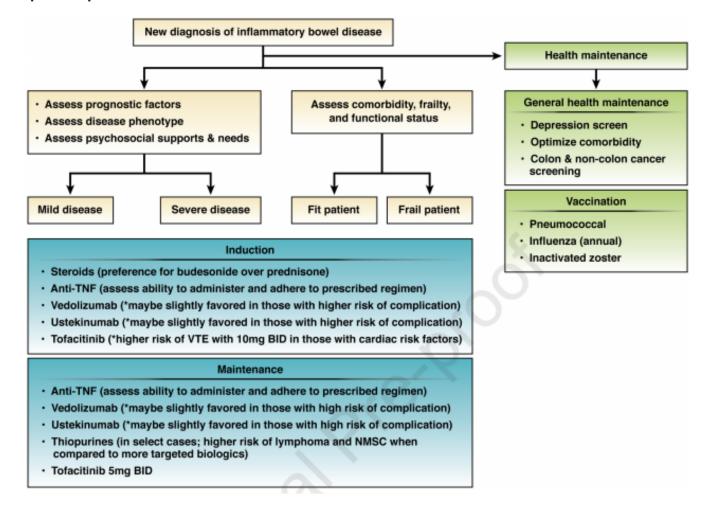
Phenotype and natural history of elderly onset inflammatory bowel disease: a multicentre, case-control study



# Management



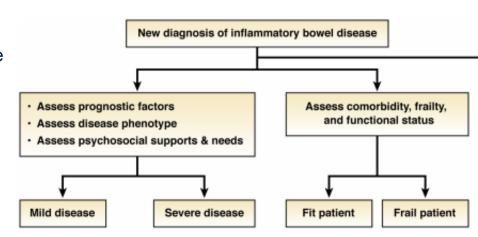
### General principles



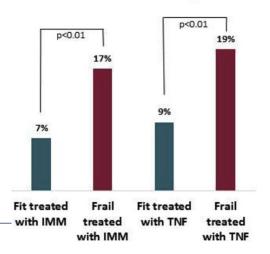


### General principles

- Multidisciplinary involve all providers
- At risk for polypharmacy complication from large number of medications
- More medical illnesses
- Depression and mental health
- Physical and cognitive function
  - Treatment-related complications
  - May need help making and getting to appointments and taking medications
  - Nutrition and physical therapy interventions
  - Pre-treatment physical decline (frailty)
     associated with risk of infections with anti TNF medications, surgery
    - 19% frail vs 9% fit developed infection



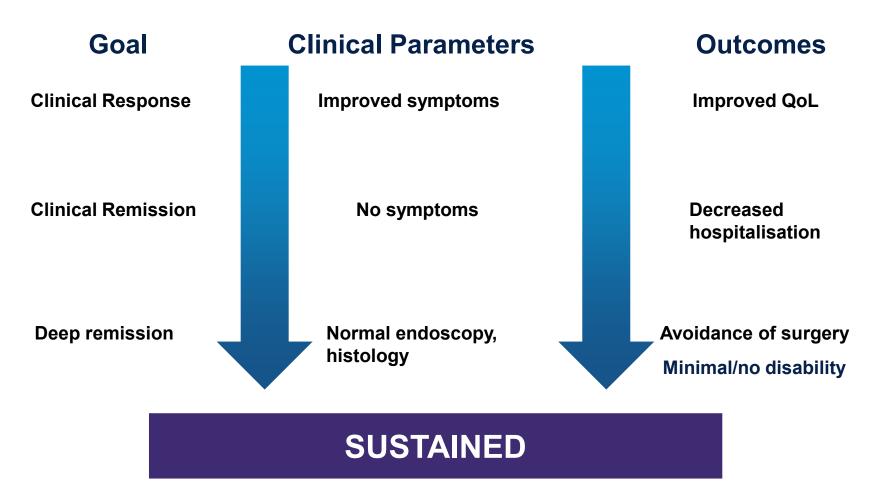
#### Infections after Immunosuppression





# Goals of Therapy for IBD:

Sustained Deep Remission







### General principles

- Similar principle to choosing medication as in younger patients
  - Age does not change how well drugs work
- Exception:
  - More safety concerns
  - Higher risk of other medical problems that can increase side effects
    - Very little safety data
  - May have a harder time giving injections to self

Therapy should not be delayed or steroid therapy prolonged out of concerns for treatment-associated risks



# General Principles

- More recen aggressive
- Early biolog hospitalizat
- Biologic use OR 0.8 and

Young (Age < 40)
Pan-colitis
Deep ulcers
H/o hospitalization
Steroid dependent
High CRP
C. diff or CMV infection

vith early, ssion

had less

rates (UC

2020 AGA UC Guidelines suggest using biologic agents early rather than gradual step up



### Medication summary

### Anti-TNF (IFX, ADA, GOL, CZA)

- IV and SQ options
- Fastest onset
- Most data
- High immunogenicity
- Good for systemic involvement
- Infection, lymphoma risk, skin CA

### JAK-inhibitor – tofacitinib

- Oral drug, not a biologic
- Rapid onset as early as 3 days
- Newest novel FDA approved therapy
- Joint involvement
- Safety concerns: Shingles, NMSC, VTE
  - Black Box warning for VTE
- Contraindicated in pregnancy

### Anti-integrin – vedolizumab

- IV (SQ coming)
- Slowest onset (up to 6 months)
- Low immunogenicity
- · Gut selective, good safety profile
- Not good for systemic involvement

### Anti- IL 12/23 - ustekinumab

- IV x 1, then SQ Q8 wks
- A little slower onset than anti-TNF
- Better for anti-TNF failure
- Low immunogenicity
- Good safety profile
- Good for skin involvement

### S1P1 - Ozanimod

- Oral
- No immunogenicity
- Approved for UC, Multiple Sclerosis
- Requires safety monitoring
- Works best for moderate severity

### Pharmacologic considerations

#### Induction

- Steroids (preference for budesonide over prednisone)
- Anti-TNF (assess ability to administer and adhere to prescribed regimen)
- Vedolizumab (\*maybe slightly favored in those with higher risk of complication)
- Ustekinumab (\*maybe slightly favored in those with higher risk of complication)
- Tofacitinib (\*higher risk of VTE with 10mg BID in those with cardiac risk factors)



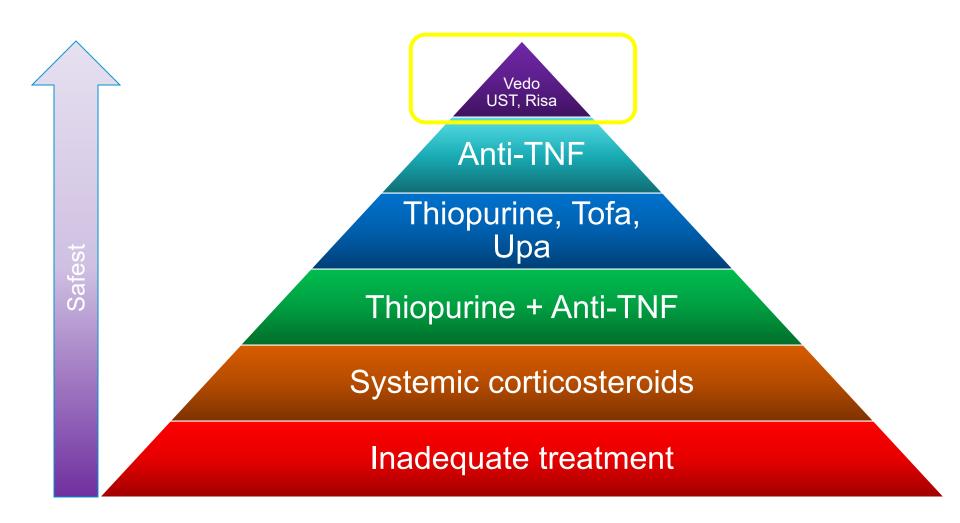
Pharmacologic considerations

#### Maintenance

- Anti-TNF (assess ability to administer and adhere to prescribed regimen)
- Vedolizumab (\*maybe slightly favored in those with high risk of complication)
- Ustekinumab (\*maybe slightly favored in those with high risk of complication)
- Thiopurines (in select cases; higher risk of lymphoma and NMSC when compared to more targeted biologics)
- Tofacitinib 5mg BID



# Safety Summary of IBD Medications





# Surgery



# Surgical considerations

- Complications after surgery also higher (34.5% vs 21.3%)
  - Risk of death
  - Infection, blood clot, bleeding, heart, kidney, neurologic
  - Emergency surgery associated with higher risk of death
  - Hospital stays > 30 days more likely (5% vs 1.8%)

### **Increased Postoperative Mortality and Complications Among Elderly Patients With Inflammatory Bowel Diseases: An Analysis** of the National Surgical Quality Improvement Program Cohort

Natasha Bollegala,\* Timothy D. Jackson,<sup>‡,§</sup> and Geoffrey C. Nguyen\*,§



# Surgical considerations

- No difference in complications for pouch surgery in elderly and frail UC patients except longer hospital stay
  - 2493 UC patients
  - Complications: 79.5% (age < 50) vs 79.1% (age > 60)
  - 0.8 days longer hospital stay for those > age 60
  - Frailty diagnosis did not change outcomes

Association for Academic Surgery

## Outcomes after ileoanal pouch surgery in frail and older adults

Jessica N. Cohan MD a, b ≅ ⊠, Peter Bacchetti PhD c, Madhulika G. Varma MD a, Emily Finlayson MD, MS a, b, d



# Surgical considerations

- May have worse functional outcomes with pouch surgery
  - Age is associated with increased chance to get end ileostomy
  - But end ileostomy chances are decreasing in 61-70 age group
- Consider conditions associated with poor pouch function:
  - Obesity, pelvic radiation, anal sphincter damage or dysfunction
- Nutrition evaluation prior to surgery
- May need blood clot prevention around surgery time
- Stoma management may have harder time managing, but studies show elderly adjust better to the stoma than younger

#### Impact of Patient Age on Procedure Type for **Ulcerative Colitis**

**A National Study** 



#### Healthcare maintenance



#### Healthcare maintenance

- Higher risk for vaccine preventable diseases
  - Shingles, Flu, pneumonia
  - Low rate of appropriate vaccines
- IBD pt's often don't have a primary doctor, even elderly IBD patients
- Ensure age-appropriate cancer screening, with special attention to skin cancer
- IBD in the colon > 8 years leads to 2x risk of colorectal cancer

#### Health maintenance

#### General health maintenance

- Depression screen
- · Optimize comorbidity
- Colon & non-colon cancer screening

#### Vaccination

- Pneumococcal
- Influenza (annual)
- Inactivated zoster



# Colorectal cancer screening

- Elderly onset IBD not associated with increased risk
- Patients diagnosed at older age may be diagnosed with colon cancer sooner after IBD diagnosis than younger patients
- Risk of missed colon cancer among older IBD 3x > non-IBD
- Patients age > 65, and > 80 have increasing risk of adverse events from colonoscopy
- Screening program using colonoscopy should only be used in those who will get benefits based on life expectancy, and are healthy enough to undergo colon surgery if pre-cancer or cancer is found



### Summary

- Treating elderly with IBD involves careful risk and benefit assessments
- Involving all doctors in decision making is of utmost importance
- Elderly pts more likely to have alternate diagnosis than IBD
- Colonoscopy is riskier in elderly patients
- Management guided by same principles, but must consider increased risk of side effects from drugs
- Must review healthcare maintenance topics, particularly vaccine preventable illnesses, cancer screenings/surveillance



### Thanks!



# Drug withdrawal

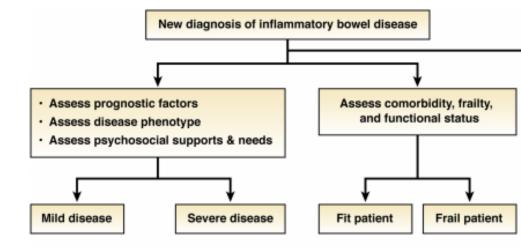
 No studies on withdrawal of medications specifically in the elderly

More recent studies of med withdrawal in a mixed population:

- Age did not predict recurrence of inflammation
- Age not associated with need for surgery after drug withdrawal
- In patients taking both infliximab and azathioprine, age did not predict failure of infliximab if azathioprine stopped



## Management of elderly IBD



#### Induction

- · Steroids (preference for budesonide over prednisone)
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#### Maintenance

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- Tofacitinib 5mg BID



- Treatment case report of Edis with first Entyvio, then stelara, then reduced EF,
  - Review general principles, highlighting comprehensive review of goals and risk factors for treatment; collaborative approach with patient and PCP



- Highlight that many of the factors associated with risk in younger patients are the same
- Budesonide, vs early biologic therapy; prefer not systemic steroid
- Lower risk biologics, balance with likelihood of remissioon.
   Increased risk of VTE, fracture, infection, malignancy cardiac, zoster. Highlight any studies with risk factor profiles
- Balance 6MP IMM with risk oof malignancy, slow onset
- Greater comorbidity burden, need to optimize
- Surgery consideration; highlight any studies on surgery and elderly; particularly J pouch abnormalities



#### HCM

- Vaccine schedule
- Colorectal cancer surveillance
- when to stop

