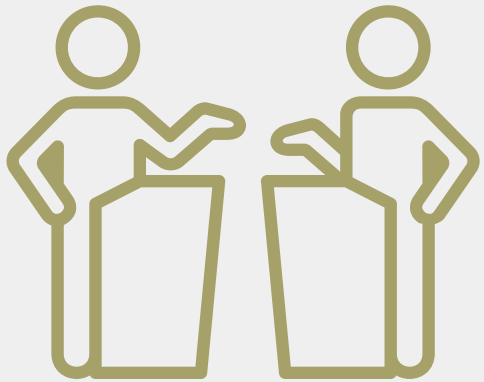
2024 Fellows Debate



Facilitated by:

Rebecca Burbridge, MD

Duke University
School of Medicine

Sanjib Mohanty, MD

Charlotte
Gastroenterology &
Hepatology

Wood Gibbs, MD

Southern
Gastroenterology
Associates

North Carolina Society of Gastroenterology
2024 Annual Meeting

DEBATE 1

Moderator: Rebecca Burbridge, MD

Case 1 Debaters

Rob Dorrell, MD

Second year fellow
Atrium Health Wake Forest
Baptist Medical Center

Faculty Mentor:
John Michael Provenza, MD

Fadi Chanaa, MD

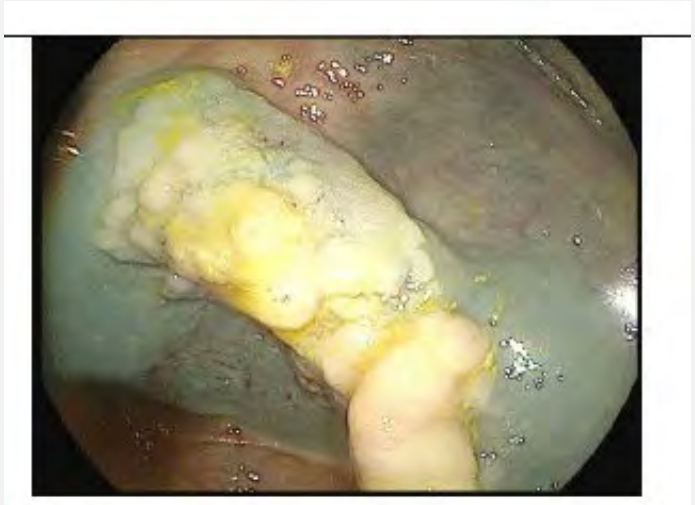
First year fellow
Atrium Health Carolinas
Medical Center

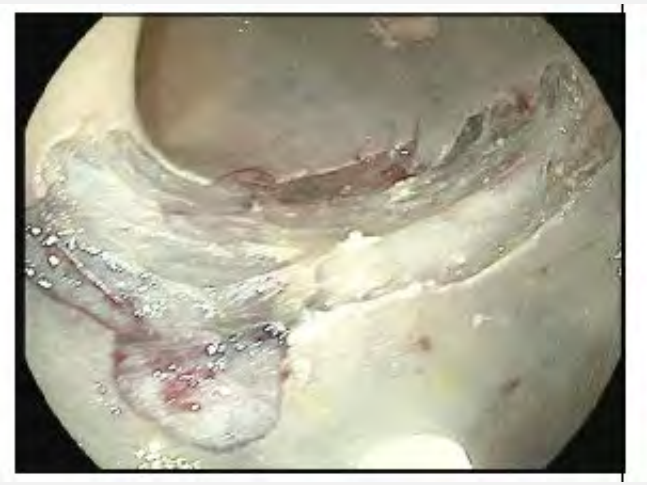
Faculty Mentor:
Sonoo Chauhan, MD

Case 1

A 55 yo male with atrial fibrillation on chronic Eliquis is referred to you for management of a 4.5 cm biopsy proven ascending colon tubular adenoma detected on index average risk screening colonoscopy. The polyp was removed in a piecemeal fashion with hot snare.

COLONOSCOPY IMAGES





Which modality is preferred to prevent post endoscopic mucosal resection bleeding?

ENDOCLIPS ALONE
VS
BARRIER THERAPY ALONE
(PURASTAT/HEMOSPRAY)

Pro Endoclip Alone

5 Minutes

Rob Dorrell, MD

Second year fellow
Atrium Health Wake Forest
Baptist Medical Center

Faculty Mentor:
John Michael Provenza, MD

A 4.5 cm ascending colon tubular adenoma in patient on eliquis. The polyp was removed in a piecemeal fashion (hot snare).

Which modality is best to prevent post EMR bleeding?

Pro Hemoclips

Robert Dorrell

Wake Forest School of Medicine

Gastroenterology Fellowship

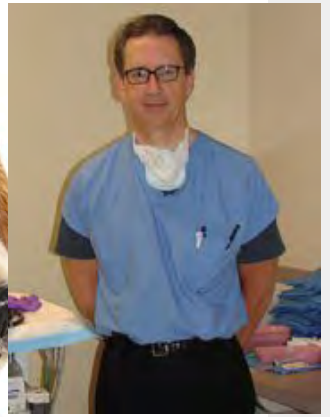
PGY-5

Post-polypectomy bleeding

- Post-polypectomy bleeding is the most common complication of colonoscopic polypectomy,
- Accounting for up to 6.1% of polypectomy
- Bleeding can occur immediately following polypectomy or be delayed up to 30 days
  - Independent factors include
    1. polyp location
    2. size
    3. Anticoagulation

How would you approach this dilemma?

PICK OF THE LITTER



What Would Doug Do?

"Any lesion >20mm in size, removed by electrocautery and proximal to splenic flexure should be clip closed"

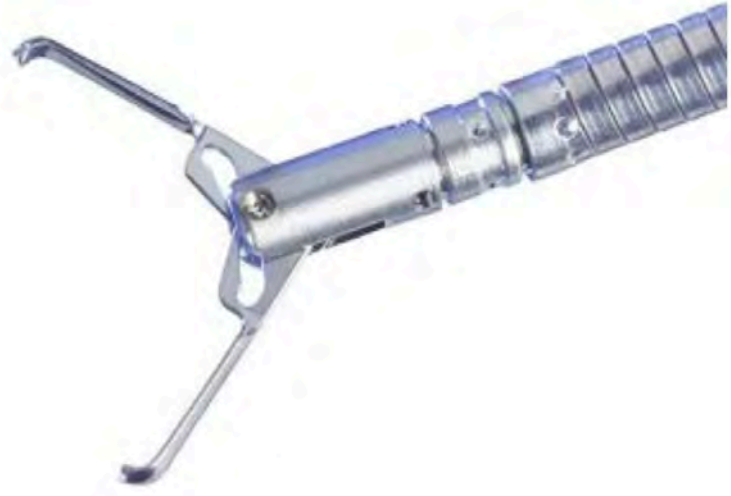
~ACG 2020, Doug Rex

Pohl and Rex Multicenter RCT 2019

- 919 patients randomly assigned to Clip closure vs control
- Primary outcome: Severe bleeding within 30 days of procedure
- Subgroup analysis: postprocedure bleeding with polyp location, size, antithrombotic medications

Pohl and Rex Multicenter RCT 2019

- Postprocedure bleeding less with clips
  - Proximal large polyp (>2cm)
    - ARD 6.3%; 95% CI 2.5%–10.1%
  - The effect of clip closure was independent of location, antithrombotic medications
  - Serious adverse events
    - ARD 4.6%; 95% CI 1.3%–8.0%.



TRIED & TRUE

Topical hemostatic agents (Hemospray)

- When hemospray comes in contact with an actively bleeding site, the powder absorbs water, then acts both cohesively and adhesive forming a mechanical barrier over **just the bleeding site**
  - Nonbleeding hemospray is washed away within 24 hours
  - Bleeding hemospray lasts up to 72 hours
  - No data to make claims on efficacy in anticoagulated patients
  - Hemospray has not yet been evaluated for its effectiveness on nonbleeding sites
  - High cost
  - Spray and pray
  - Scope cleaning

Hemospray : like driving a car covered in snow

Topical hemostatic agents for prevention of bleeding: Purastat

- When in contact with blood the change in pH causes the self assembly of Purastat to occur rapidly at the interface between it and the bleeding point, gaining further strength as the reaction occurs

  - Requires bleeding
  - Unproven in anticoagulated patients
  - Unknown length of adherence
  - Application requires dependency
  - Scope damage
  - Scope cleaning

Pro Barrier Therapy Alone

5 Minutes

Fadi Chanaa, MD

First year fellow
Atrium Health Carolinas Medical Center

Faculty Mentor:
Sonoo Chauhan, MD

Atrium Health

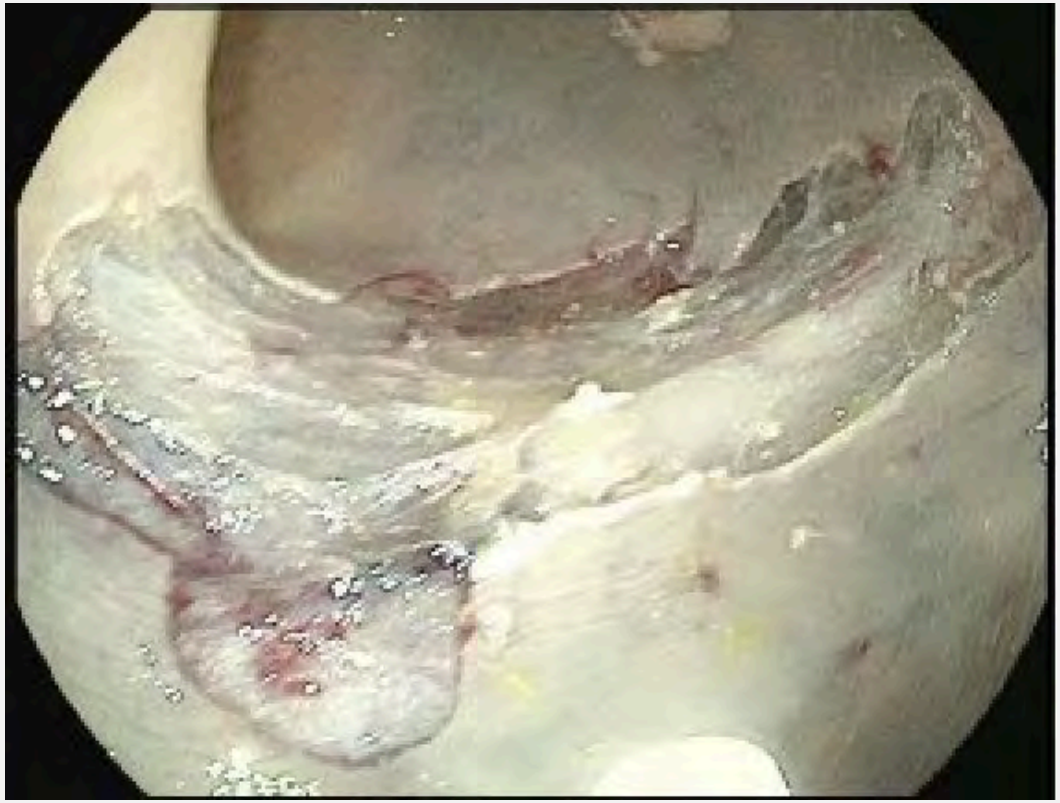
Barrier Therapy for Endoscopic Mucosal Resection

Pro Barrier Therapy - Importance

Occurs in ~6% of EMR of > 2 cm lesion

Factors:

1. Antithrombotic agents
2. Age of patient
3. Proximal location
4. Size of lesion
5. Intraprocedural bleeding
6. Visible Cut Vessels
7. Degree of heat injury
8. Visible muscle fibers



1. Burgess NG et al. Risk factors for intraprocedural and clinically significant delayed bleeding after wide-field endoscopic mucosal resection of large colonic lesions. *Clin Gastroenterol Hepatol*. 2014;12(4):651-61.
2. Kim GU et al. Association between the ulcer status and the risk of delayed bleeding after the endoscopic mucosal resection of colon. *J Gastroenterol Hepatol*. 2017;32(11):1846-1851.
3. Elliott TR et al. Factors associated with delayed bleeding after resection of large nonpedunculated colorectal polyps. *Endoscopy*. 2018;50(8):790-799.

Atrium Health

Pro Barrier Therapy - Options

1. Hemostatic Powder (Hemospray, Nexpowder)
2. Polyglycolic Acid Sheets
3. Fibrin Glue
4. Hemocoagulase Bothrops Atrox
5. Absorbable Modified Polymers (EndoCLOT)
6. Oxidized Regenerated Cellulose (Surgicell)
7. **Self Assembling Peptide (Purastat)**

Pro Barrier Therapy – Self-Assembling Peptide

ueg journal

Original Article | Open Access

Haemostasis and prevention of bleeding related to ER: The role of a novel self-assembling peptide

Home > Digestive Diseases and Sciences > Article

New Alternative? Self-Assembling Peptide in Gastrointestinal Bleeding: A Systematic Review and Meta-Analysis

Endoscopy 2021; 53(01): 27-35
DOI: 10.1055/a-1198-0558

Download PD

Original article

A novel self-assembling peptide for hemostasis during endoscopic submucosal dissection: a randomized controlled trial

Sharmila Subramaniam , Kesavan Kandiah , Fergus Chedgy , Carole Fogg , Sreedhari Thayalasekaran , Asma Alkandari , Michelle Baker-Moffatt , Joanne Dash , Mark Lyons-Amos , Gaius Longcroft-Wheaton , James Brown , Pradeep Bhandari

AJG The American Journal of GASTROENTEROLOGY

ARTICLE: ENDOSCOPY

Efficacy and Safety of a Novel Hemostatic Peptide Solution During Endoscopic Submucosal Dissection: A Multicenter Randomized Controlled Trial

Original article

Efficacy of self-assembling peptide in mitigating delayed bleeding after advanced endoscopic resection of gastrointestinal lesions: A meta-analysis

Atrium Health

Pro Barrier Therapy – Benefits of SAP

1. Small amount needed
2. Quick hemostasis
3. Does not disrupt mucosa
4. Easy to use
5. Clear visualization
6. Cover large areas

Atrium Health

Pro Barrier Therapy – Evidence of SAP

Efficacy and Safety of a Novel Hemostatic Peptide Solution During Endoscopic Submucosal Dissection: A Multicenter Randomized Controlled Trial

- RCT involving 227 patients undergoing ESD for rectal and gastric epithelial tumors.

- **Intervention:** SAP +/- Hemostatic forceps
- **Control:** Hemostatic forceps only
- **Outcomes:** Mean # coagulations w/ forceps

- Significantly reduced # of coagulations with investigative vs control (1.0 vs 4.9, p<0.001). Mean dose 1.75ml.

A novel self-assembling peptide for hemostasis during endoscopic submucosal dissection: a randomized controlled trial

- RCT of 101 patients undergoing ESD for esophageal or colonic lesions > 2 cm.

- **Intervention**: SAP +/- Electrocoagulation
- **Control:** Electrocoagulation only.
- **Outcomes:** % use of forceps, Mucosal healing

- Intervention used 48% less cautery and higher rates of complete mucosal healing (49% vs 25%, P<0.02).

1. Uraoka T et al. Efficacy and Safety of a Novel Hemostatic Peptide Solution During Endoscopic Submucosal Dissection: A Multicenter Randomized Controlled Trial. *Am J Gastroenterol*. 2023;118(2):276-283.
2. Subramaniam S et al. A novel self-assembling peptide for hemostasis during endoscopic submucosal dissection: a randomized controlled trial. *Endoscopy*. 2021;53(1):27-35.

Atrium Health

Pro Barrier Therapy – Evidence of SAP

Haemostasis and prevention of bleeding related to ER: The role of a novel self-assembling peptide

- Prospective study evaluating 100 patients undergoing endoscopic resection (ER) of GI lesions > 3 cm.
- **Intervention**: SAP applied to base of resected lesion as primary hemostat and for prophylaxis.
- Delayed bleeding (DB) occurred in 3% of lesions.

Efficacy of self-assembling peptide in mitigating delayed bleeding after advanced endoscopic resection of gastrointestinal lesions: A meta-analysis

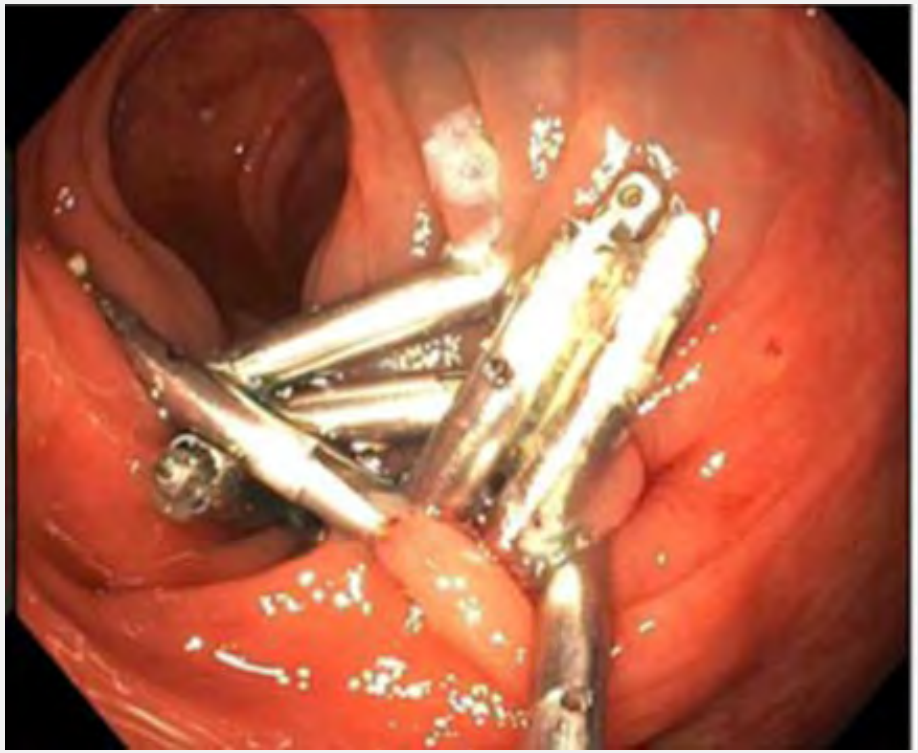
- 6 studies and 322 procedures that used SAP as prophylaxis for post ER bleeding.
- **1° outcome:** Efficacy in preventing DB after ER of lesion.
- **2° outcomes:** Rates of DB based on the location and AE rates.
- The overall pooled DB rate post-ER was 5.7%, colorectal was 5.1%. No AE attributed to SAP.

1. Subramaniam S et al. Haemostasis and prevention of bleeding related to ER: The role of a novel self-assembling peptide. *United European Gastroenterol J*. 2019;7(1):155-162.
2. Gopakumar H et al. Efficacy of self-assembling peptide in mitigating delayed bleeding after advanced endoscopic resection of gastrointestinal lesions: A meta-analysis. *Endosc Int Open*. 2023;11(5):E553-E560.

Atrium Health

Clips? Just Say No

1. Technical difficulty
2. Length of procedure
3. Interferes with treatment
4. High cost
5. Complications



Clips - Complications

Device Problem	N (%)
Activation, separation, or positioning	2133 (83.84)
Mechanical Error (break, jam, deformation, ect..)	404 (15.91%)
Detachment of device component	68 (2.68)

Patient Problem	N (%)
Hemorrhage	57 (2.24)
Tissue Damage	42 (1.65)
Perforation	15 (0.59)

1. Ramai D et al. Adverse Events of Endoscopic Clip Placement: A MAUDE Database Analysis. *J Clin Gastroenterol*. 2024;58(1):76-79.

Atrium Health

Clips Do Not work

Efficacy of Prophylactic Hemoclips in Prevention of Delayed Post-Polypectomy Bleeding in Patients With Large Colonic Polyps.

- RCT of patients undergoing polypectomy of polyp > 1cm.
- Intervention: Prophylactic clips (n = 547)
- Control: No clips (n = 551)
- Intervention had DB in 2.3% pts while control in 2.9% pts (CI, 0.37 to 1.66).
- Subgroup analysis: No difference in polyps ≥2 cm (4.0% vs 5.0%; *P* = .82) or in proximal lesions (4.6% vs 4.7%).

The effect of prophylactic hemoclips on the risk of delayed post-endoscopic mucosal resection bleed for upper and lower gastrointestinal lesions: a retrospective cohort study

- Included 657 lesions throughout GI tract.
- Clip (n = 337) and No clip (n = 320)
- Mean lesion size ~ 2.5 cm
- Hemoclip group resulted in 1.1% DB while 1.7% in no-hemoclip group (p = 0.204).
- No difference when stratified into upper and lower GI tract.

1. Feagins LA et al. Efficacy of Prophylactic Hemoclips in Prevention of Delayed Post-Polypectomy Bleeding in Patients With Large Colonic Polyps. *Gastroenterology*. 2019;157(4):967-976.e1.
2. Chang K et al. The effect of prophylactic hemoclips on the risk of delayed post-endoscopic mucosal resection bleed for upper and lower gastrointestinal lesions: a retrospective cohort study. *BMC Gastroenterol*. 2020;20(1):60.

Clips Do Not work

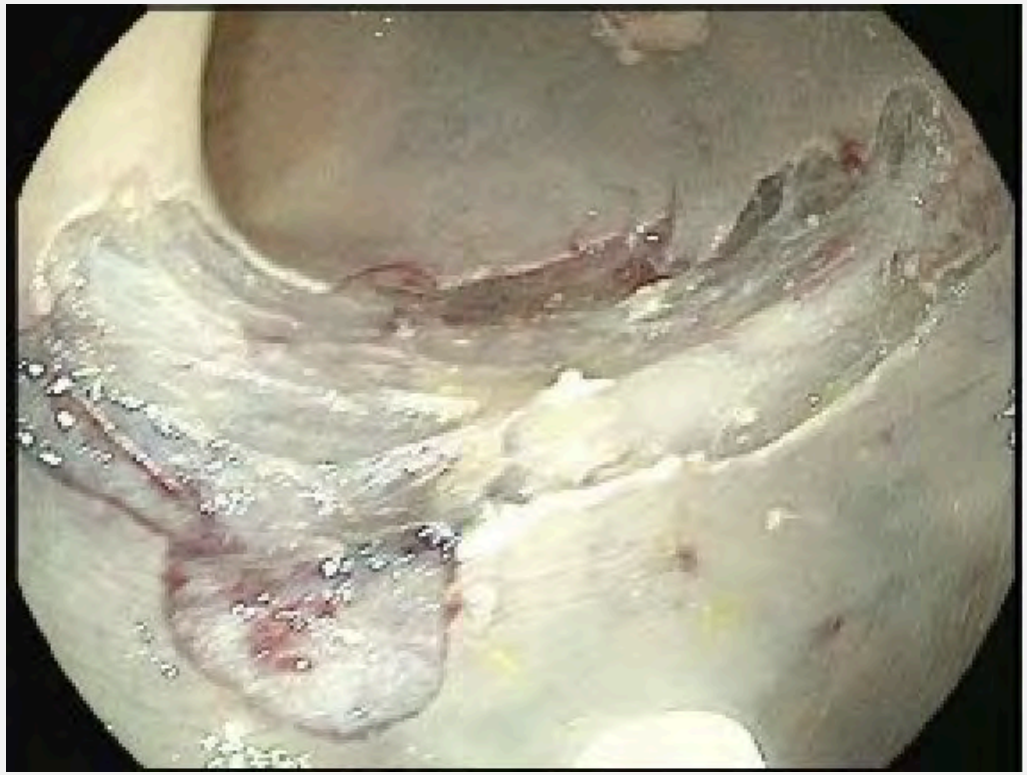
Effect of prophylactic clipping in colorectal endoscopic resection: A meta-analysis of randomized controlled studies	Prevention of delayed post-polypectomy bleeding by prophylactic clipping after endoscopic colorectal polypectomy: a meta-analysis
• Meta-analysis of RCTs evaluating prophylactic clipping after resection. • Clipping (n = 1533) vs No clip (n = 1526) • DB occurred in 2.1% of clipping group and 2.7% in no clip group (p=0.41) • Subgroup analysis: No difference in lesions >2 cm.	• Included 8 studies with 5648 patients and 10,436 lesions. • Prophylactic clipping did not reduce the overall risk of DB compared with no clipping (1.54% vs 2.05% P = 0.06)

1. Nishizawa T et al. Effect of prophylactic clipping in colorectal endoscopic resection: A meta-analysis of randomized controlled studies. *United European Gastroenterol J*. 2017;5(6):859-867.
2. Yu Z et al. Prevention of delayed post-polypectomy bleeding by prophylactic clipping after endoscopic colorectal polypectomy: a meta-analysis. *Int J Colorectal Dis*. 2022;37(10):2229-2236.

Atrium Health

Pro Barrier Therapy - Summary

1. Easier to perform.
2. Quicker procedure.
3. Less interference with therapy.
4. Cheaper than using 3+ clips.
5. Fewer complications.
6. Ideal for prophylaxis.



2 MINUTES TO CONFER WITH MENTORS

SPORTS TRIVIA

- WHICH IS THE ONLY ONE OF THESE COLLEGES THAT **DID NOT WIN** THE MEN'S NCAA NATIONAL BASKETBALL CHAMPIONSHIP DURING THE 20 TH CENTURY?

- DUKE
- WAKE FOREST ⟵
- UNC
- NC STATE

SPORTS TRIVIA

- WHAT CLASSIC GAME IS WIDELY BELIEVED TO HAVE BEEN FIRST PLAYED IN NORTH CAROLINA?

- BADMINTON
- CROQUET
- MINIATURE GOLF 
- HORSESHOES

SPORTS TRIVIA

- WHAT SPORT DID THE GENERAL ASSEMBLY SELECT IN 2011 AS THE STATE SPORT OF NORTH CAROLINA?

- BASKETBALL
- FOOTBALL
- STOCK CAR RACING 
- HOCKEY

SPORTS TRIVIA

- WHAT ARE THE ODDS OF FILLING OUT A PERFECT MARCH MARDNESS BRACKET?

- 1 IN 9.2 TRILLION
- 1 IN 9.2 BILLION
- 1 IN 9.2 QUINTILLION ⟵
- 1 IN 9.2 GAZILLION

SPORTS TRIVIA

- WHAT PERCENTAGE OF DUKE'S STUDENT-ATHELETES GRADUATED IN 2006, THE HIGHEST OF ANY U.S. COLLEGE?

- 83%
- 75%
- 87%
- 91% 

SPORTS TRIVIA

- WHAT WAS THE FIRST TEAM WITH 20 FINAL FOUR APPEARANCES?

- NORTH CAROLINA ←
- DUKE
- WAKE FOREST
- NC STATE

2 MINUTE REBUTTAL

ATRIUM HEALTH CAROLINAS MEDICAL CENTER

2 MINUTE REBUTTAL

ATRIUM HEALTH WAKE FOREST BAPTIST MEDICAL CENTER

JUDGES QUESTIONS

North Carolina Society of Gastroenterology
2024 Annual Meeting

DEBATE 2

Moderator: Sanjib Mohanty, MD

Case 2 Debaters

Trevor Barlowe, MD

Second year fellow
UNC School of Medicine

Faculty Mentor:
Michael Dougherty MD, MSCR

Alex Reddy, MD

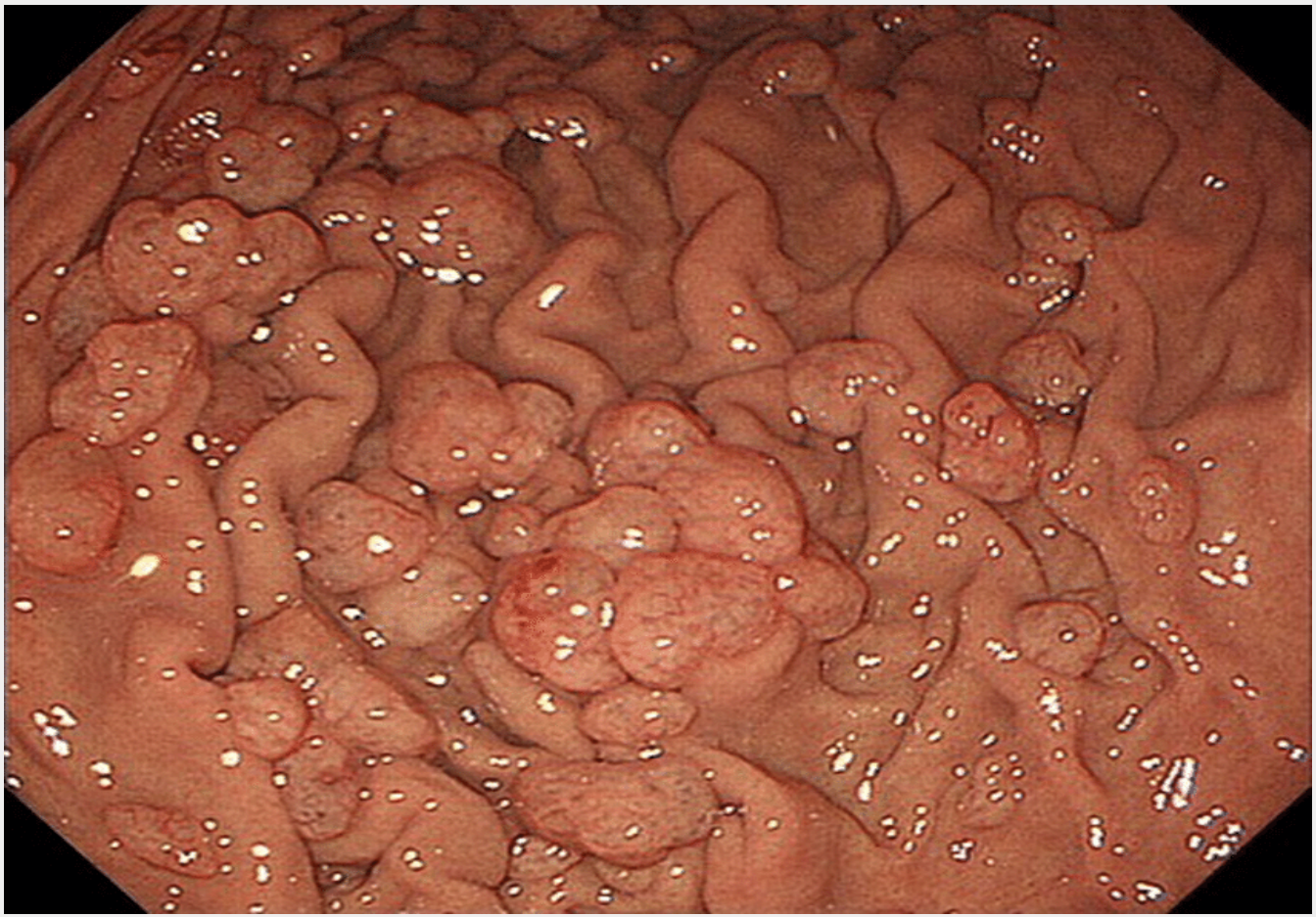
Third year fellow
Duke University School of Medicine

Faculty Mentor:
Richard Wood, MD

Case 2

62 year old male with a history of coronary artery disease, diabetes mellitus s/p CVA on chronic anticoagulation with Plavix who presents with a three month history of intermittent heartburn with new onset solid food dysphagia. His cardiologist gives clearance to hold Plavix for five days although he is deemed a high risk candidate for having a thromboembolic event.

He undergoes an endoscopy which reveals a normal appearing esophagus and duodenum. His stomach is notable for 20-30 gastric polyps in the fundus and gastric body measuring 5 mm-2 cm.



Representative biopsies are obtained revealing a mix of fundic gland and hyperplastic polyps without metaplasia/dysplasia.

Is a repeat endoscopy indicated for polyp resection or can the patient be managed conservatively without repeat examination knowing he is a high-risk candidate for being off anticoagulation and postpolypectomy bleeding?

Pro Repeat EGD

5 Minutes

Trevor Barlowe, MD

Second year fellow
UNC School of Medicine

Faculty Mentor:
Michael Dougherty MD, MSCR

NCSG Fellows Debate

February 10, 2024

Fellow: Trevor Barlowe, MD

Faculty: Michael Dougherty, MD, MSCR

UNC SCHOOL OF MEDICINE

Case

UNC SCHOOL OF MEDICINE

62yo M with coronary artery disease, diabetes mellitus, s/p CVA on chronic anticoagulation (Plavix) who presents with a 3-month history of intermittent heartburn with new onset solid food dysphagia.

His cardiologist gives clearance to hold Plavix for five days although he is deemed a high-risk candidate for having a thromboembolic event.

He undergoes an endoscopy which reveals a normal appearing esophagus and duodenum. His stomach is ***notable for 20-30 gastric polyps in the fundus and gastric body measuring 5mm - 2cm****. Representative biopsies are obtained revealing a mix of* ***fundic gland and hyperplastic polyps*** *without metaplasia/dysplasia.*

Is a repeat endoscopy indicated for polyp resection *or* ***can the patient be managed conservatively*** *without repeat examination knowing he is a high-risk candidate for being off anticoagulation and post polypectomy bleeding?*


Evidence based medicine
(Polyp resection)


Shoot from the hip medicine
(Do nothing)

1. Gastric hyperplastic polyps have malignant potential

Hyperplastic polyps in the stomach are **DIFFERENT** than hyperplastic polyps in the colon

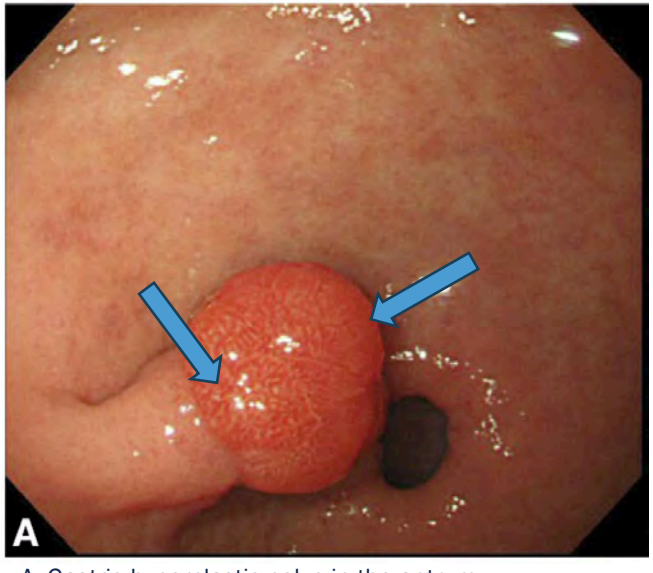
Up to 20% of gastric hyperplastic polyps contain dysplasia or focal cancer[1]

Size matters: Hyperplastic polyps >1cm have higher malignant potential[2]

- 5mm - 2cm polyps in our case

Pathology results between gastric polyp surface biopsy and polypectomy only **agree 55.8% of the time**[3]

- **We can't trust the biopsy results** showing no metaplasia or dysplasia



A. Gastric hyperplastic polyp in the antrum
Taken from Shaib et. al., 2013[4]

2. Gastric polypectomy is safe from a bleeding

2002 prospective, multicenter study of **222 gastric polypectomies**[3]

- **16/222 (7.2%) experienced intraprocedural bleeding**
- Bleeding stopped spontaneously in 3 cases
- 13 cases required a clip or injection
- **No mortality**

ORIGINAL ARTICLE

Diagnostic accuracy of forceps biopsy versus polypectomy for gastric polyps: a prospective multicentre study

S M Muehldorfer, M Stolte, P Martus, E G Hahn, C Ell, for the Multicenter Study Group "Gastric Polyps"

Gut 2002;**50**:465–470

2017 prospective, multicenter study of **308 patients who underwent gastric polypectomy: 6/308 (1.9%) experienced bleeding** requiring intervention[5]

Submit a Manuscript: http://www.f6publishing.com — *World J Gastroenterol* 2017 December 21; 23(47): 8405-8414

DOI: 10.3748/wjg.v23.i47.8405 — ISSN 1007-9327 (print) ISSN 2219-2840 (online)

ORIGINAL ARTICLE

Observational Study

Rate of adverse events of gastroduodenal snare polypectomy for non-flat polyp is low: A prospective and multicenter study

Many methods to stop or prevent bleeding[6]: clips (standard or over the scope), Hemospray, EndoClot, start PPI post polypectomy

Polypectomy might **prevent future bleeding** in this patient who will need lifelong antithrombotic therapy[7]

The patient was **cleared by his Cardiologist for an EGD** and we are not told that the stroke is recent or that there are cardiac stents in place

2022 ACG guidelines[8] cite an RCT[9] of patients on Plavix who underwent endoscopy

- **Stop Plavix/placebo arm:** 0 had a CV event
- **Continue Plavix arm:** 2.6% had a CV event

You could put the patient on ASA for the procedure if you are worried about thrombosis[8]

Supplementary Table 1. Postpolypectomy Bleeding and Serious Cardiovascular Events (Stratified Analysis According to Concomitant Aspirin Use)

Outcomes	Clopidogrel	Placebo	*P* value
Patients who did not take concomitant aspirin			
Delayed postpolypectomy bleeding	0	0	—
Immediate postpolypectomy bleeding[c]	4.5 (0.8–21.8)	12.5 (4.3–31.0)	.609[f]
Serious cardiovascular events[d]	2.6 (0.4–17.3)	0	.271[f]
Patients who took concomitant aspirin			
Delayed postpolypectomy bleeding	4.8 (1.8–12.2)	4.7 (1.8–11.9)	.958[f]
Immediate postpolypectomy bleeding[c]	9.5 (4.9–17.7)	3.5 (1.2–9.8)	.110[f]
Serious cardiovascular events[d]	1.3 (0.3–5.0)	2.7 (1.0–7.0)	.386[f]

[d]Serious cardio-thrombotic events were defined according to the Antithrombotic Trialists' criteria (nonfatal myocardial infarction, nonfatal stroke, or death from a vascular cause).

"20-30 gastric polyps in the fundus and gastric body measuring 5mm - 2cm. Representative biopsies are obtained revealing a mix of ***fundic gland and hyperplastic polyps."***

Source	Recommendation
2013 ASGE guidelines[10]	*"Fundic gland polyps >1cm should undergo polypectomy. Hyperplastic polyp >0.5cm should undergo polypectomy."*
2015 ASGE guidelines[11]	*"We suggest polypectomy of fundic gland polyps 1 cm or larger, hyperplastic polyps 0.5 cm or larger, and adenomatous polyps of any size when possible."*
2018 British Society of GI guidelines[12]	*"We suggest that hyperplastic polyps >1cm, pedunculated morphology and those causing symptoms (obstruction, bleeding) should be resected."*
UpToDate[13]	*"Hyperplastic polyps measuring >0.5 cm should be resected completely."*

Shoot from the hip?

Shoot from the hip?

After being diagnosed with metastatic gastric cancer, his family decided to sue the medical team after they read clinical guidelines readily available on the internet and realized the team blatantly disregarded them.

UNC SCHOOL OF MEDICINE

This patient with came to your office for help

He was found to have numerous, large, gastric hyperplastic polyps

He was willing to accept the risk of endoscopy to evaluate dysphagia and GERD

He tolerated the initial upper endoscopy well

The evidence strongly suggests that the appropriate management for him is polypectomy:

1. Gastric hyperplastic polyps have malignant potential and surface biopsies are inaccurate
2. Gastric polypectomy is safe from a bleeding perspective
3. The risk of a thrombotic event is low
4. All available guidelines suggest polypectomy

TRUST THE EVIDENCE!

UNC SCHOOL OF MEDICINE

1. Carmack SW, Genta RM, Graham DY, Lauwers GY. Management of gastric polyps: a pathology-based guide for gastroenterologists. Nat Rev Gastroenterol Hepatol 2009;6:331-41.
2. Han AR, Sung CO, Kim KM, et al. The clinicopathological features of gastric hyperplastic polyps with neoplastic transformations: a suggestion of indication for endoscopic polypectomy. Gut Liver 2009;3:271-5.
3. Muehldorfer SM, Stolte M, Martus P, et al. Diagnostic accuracy of forceps biopsy versus polypectomy for gastric polyps: a prospective multicentre study. Gut 2002;50:465-70.
4. Shaib YH, Rugge M, Graham DY, Genta RM. Management of gastric polyps: an endoscopy-based approach. Clin Gastroenterol Hepatol 2013;11:1374-84.
5. Cordova H, Arguello L, Loras C, et al. Rate of adverse events of gastroduodenal snare polypectomy for non-flat polyp is low: A prospective and multicenter study. World J Gastroenterol 2017;23:8405-8414.
6. Naseer M, Lambert K, Hamed A, Ali E. Endoscopic advances in the management of non-variceal upper gastrointestinal bleeding: A review. World J Gastrointest Endosc 2020;12:1-16.
7. Al-Haddad M, Ward EM, Bouras EP, Raimondo M. Hyperplastic polyps of the gastric antrum in patients with gastrointestinal blood loss. Dig Dis Sci 2007;52:105-9.
8. Abraham NS, Barkun AN, Sauer BG, et al. American College of Gastroenterology-Canadian Association of Gastroenterology Clinical Practice Guideline: Management of Anticoagulants and Antiplatelets During Acute Gastrointestinal Bleeding and the Periendoscopic Period. Am J Gastroenterol 2022;117:542-558.
9. Chan FKL, Kyaw MH, Hsiang JC, et al. Risk of Postpolypectomy Bleeding With Uninterrupted Clopidogrel Therapy in an Industry-Independent, Double-Blind, Randomized Trial. Gastroenterology 2019;156:918-925 e1.
10. Committee ASoP, Sharaf RN, Shergill AK, et al. Endoscopic mucosal tissue sampling. Gastrointest Endosc 2013;78:216-24.
11. Committee ASoP, Evans JA, Chandrasekhara V, et al. The role of endoscopy in the management of premalignant and malignant conditions of the stomach. Gastrointest Endosc 2015;82:1-8.
12. Banks M, Graham D, Jansen M, et al. British Society of Gastroenterology guidelines on the diagnosis and management of patients at risk of gastric adenocarcinoma. Gut 2019;68:1545-1575.
13. Varocha Mahachai DYG, Robert D Odze. Gastric Polyps: UpToDate, 2024.

No EGD

5 Minutes

Alex Reddy, MD

Third year fellow
Duke University School of Medicine

Faculty Mentor:
Richard Wood, MD

NCSG Fellows Debate

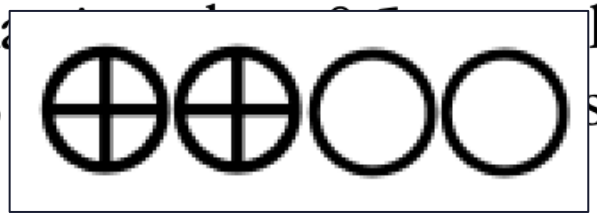
Alex Reddy, PGY-6
February 10, 2024

Mentors:
Dr. Melissa Teitelman
Dr. Dan Wild
Dr. Rick Wood

DukeHealth

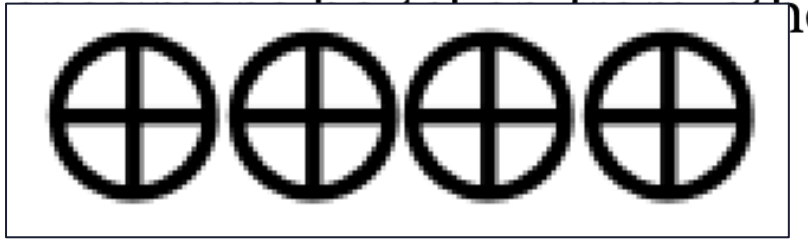
ASGE Guidelines

2. We suggest polypectomy of fundic gland polyps 1 cm or larger, hyperpl[illegible]larger, and adenomatous polyps [illegible]sible. ⊕⊕○○



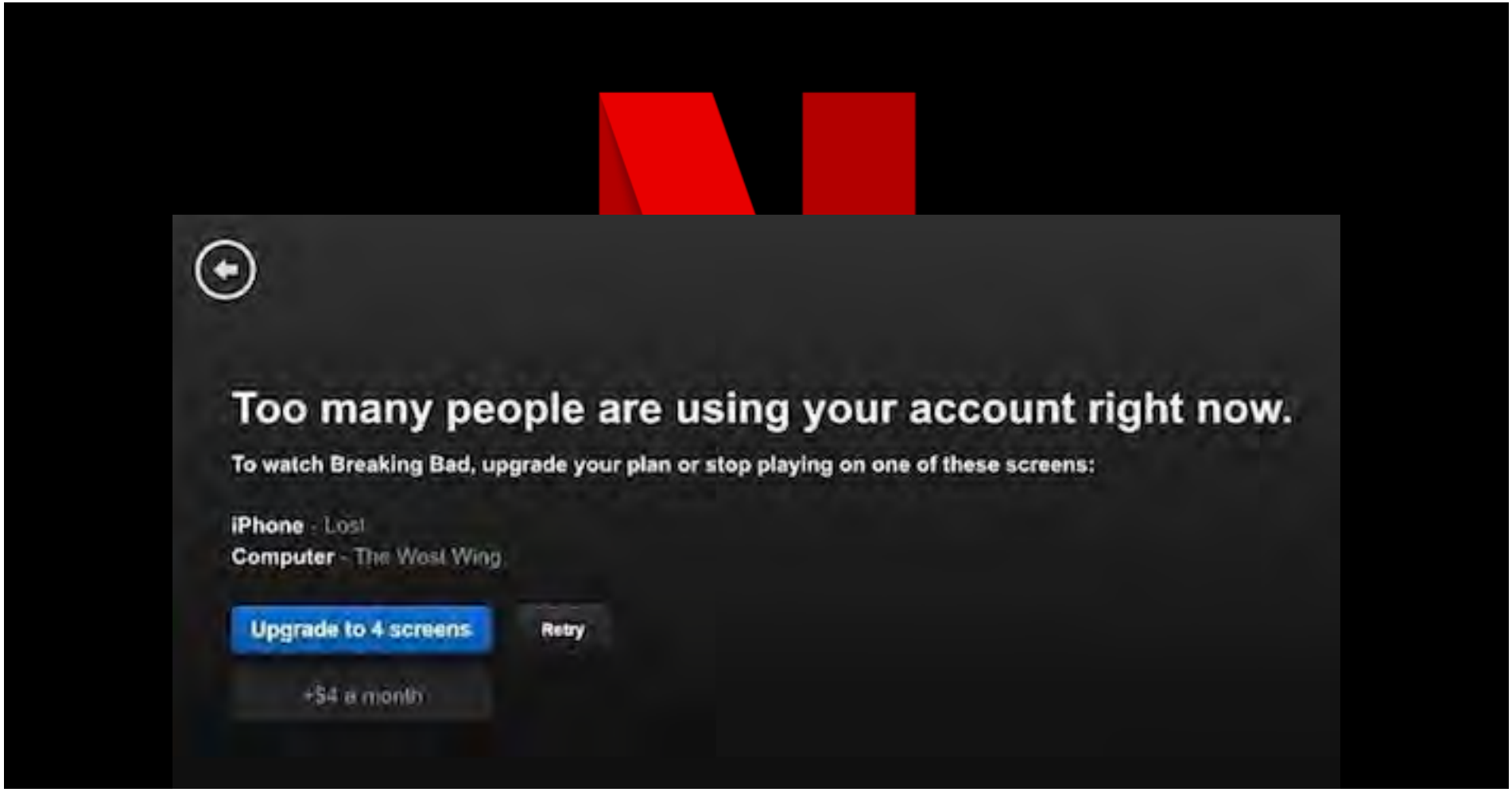
LOW QUALITY

4. In the setting of multiple polyps, we recommend biopsy or resection of the largest polyps and representative biopsy [illegible]hers. ⊕⊕⊕⊕



HIGH QUALITY

Guidelines


Too many people are using your account right now.
To watch Breaking Bad, upgrade your plan or stop playing on one of these screens:
iPhone - Lost
Computer - The West Wing
Upgrade to 4 screens
Retry
+$4 a month

Case Highlights

NO!

this particular scenario?

Why No EGD?

The polyps are low risk!!

- **Majority are fundic gland polyps**
  - **2009 prospective cohort (CGH)**
  - **>100,000 patients enrolled**
  - **0 cases of high grade dysplasia or carcinoma**
  - **Inverse relationship between FGP and gastric adenocarcinoma**

Why No EGD?

The polyps are low risk!!

- **A small minority are hyperplastic polyps**
- **No metaplasia or dysplasia**
- **Size ranging from 5-20mm**
  - **2021 retrospective cohort (GE Port J Gastroenterol)**
    - **Multivariate analysis: size >25mm associated with neoplastic transformation in HP**
  - **2020 retrospective cohort (Endoscopy)**
    - **High grade dysplasia and carcinoma only seen in HP size >50mm**

Why No EGD?

The procedure is high risk!!

- **High bleeding risk**
  - **4-7.2% rate after gastric polypectomy**
  - **Risk is even higher when more polyps and on Plavix**
- **High thrombotic risk**
  - **Leading cause of death in US is heart disease**
- **High recurrence risk**
  - **23%-55%**
  - **Multiple endoscopies!!**


464917273


464917273

Why No EGD?

Preferred alternatives exist for hyperplastic polyps!

- H pylori testing should be performed
- If positive, eradication therapy should be provided

PO Box 2345, Beijing 100023, China
www.wjgnet.com
wjg@wjgnet.com

World J Gastroenterol 2006 March 21; 12(11): 1770-1773
World Journal of Gastroenterology ISSN 1007-9327

RAPID COMMUNICATION

Effect of drug treatment on hyper[illegible]

Helicobacter pylori Eradicatio[illegible]
A Randomized Controlled Tria[illegible]

Su Youn Nam[1] · Sang Won Lee[1] · Seong Woo Jeon[1] · Yong Hwan Kwon[1] · Hyun Seok Lee[1]

50-80% resolved

Annals of Internal Medicine®

Disappearance of Hyperplastic Polyps in the Stomach after Eradication of *Helicobacter pylori*

A Randomized, Controlled Trial

[illegible]akashimizu, MD;
[illegible]ki, MD;
[illegible]chi, MD;
[illegible]ro Ariake, MD;
Kenichi Ishii, MD; Jiro Kumagai, MD; and
Toru Tanizawa, MD

Take Home Points

- Guidelines **are not** one-
- Low risk polyps!!
- High
  - Bleed
- Preferred, non-
  - H pylori testin

References

- ASGE Standards of Practice Committee; Evans JA, Chandrasekhara V, Chathadi KV, Decker GA, Early DS, Fisher DA, Foley K, Hwang JH, Jue TL, Lightdale JR, Pasha SF, Sharaf R, Shergill AK, Cash BD, DeWitt JM. The role of endoscopy in the management of premalignant and malignant conditions of the stomach. Gastrointest Endosc. 2015 Jul;82(1):1-8. doi: 10.1016/j.gie.2015.03.1967. Epub 2015 Apr 29. PMID: 25935705.
- Forté E, Petit B, Walter T, Lépilliez V, Vanbiervliet G, Rostain F, Barsic N, Albeniz E, Gete GG, Gabriel JCM, Cuadrado-Tiemblo C, Ratone JP, Jacques J, Wallenhorst T, Subtil F, Albouys J, Giovannini M, Chaussade S, Landel V, Ponchon T, Saurin JC, Barret M, Pioche M. Risk of neoplastic change in large gastric hyperplastic polyps and recurrence after endoscopic resection. Endoscopy. 2020 Jun;52(6):444-453. doi: 10.1055/a-1117-3166. Epub 2020 Mar 2. PMID: 32120411.
- Genta RM, Schuler CM, Robiou CI, Lash RH. No association between gastric fundic gland polyps and gastrointestinal neoplasia in a study of over 100,000 patients. Clin Gastroenterol Hepatol. 2009 Aug;7(8):849-54. doi: 10.1016/j.cgh.2009.05.015. Epub 2009 May 22. PMID: 19465154.
- Ji F, Wang ZW, Ning JW, Wang QY, Chen JY, Li YM. Effect of drug treatment on hyperplastic gastric polyps infected with Helicobacter pylori: a randomized, controlled trial. World J Gastroenterol. 2006 Mar 21;12(11):1770-3. doi: 10.3748/wjg.v12.i11.1770. PMID: 16586550; PMCID: PMC4124356.
- João M, Areia M, Alves S, Elvas L, Taveira F, Brito D, Saraiva S, Teresa Cadime A. Gastric Hyperplastic Polyps: A Benign Entity? Analysis of Recurrence and Neoplastic Transformation in a Cohort Study. GE Port J Gastroenterol. 2021 Sep;28(5):328-335. doi: 10.1159/000514714. Epub 2021 Apr 9. PMID: 34604464; PMCID: PMC8443946.
- Lang, Gabriel MD; Nalbantoglu, Ilke MD; Early, Dayna MD; Mullady, Daniel MD; Kushnir, Vladimir MD. High Recurrence Rate of Large Hyperplastic Polyps After Endoscopic Resection: 1148. American Journal of Gastroenterology 111():p S499, October 2016.
- Muehldorfer SM, Stolte M, Martus P, Hahn EG, Ell C; Multicenter Study Group "Gastric Polyps". Diagnostic accuracy of forceps biopsy versus polypectomy for gastric polyps: a prospective multicentre study. Gut. 2002 Apr;50(4):465-70. doi: 10.1136/gut.50.4.465. PMID: 11889063; PMCID: PMC1773183.
- Nam SY, Lee SW, Jeon SW, Kwon YH, Lee HS. Helicobacter pylori Eradication Regressed Gastric Hyperplastic Polyp: A Randomized Controlled Trial. Dig Dis Sci. 2020 Dec;65(12):3652-3659. doi: 10.1007/s10620-020-06065-0. Epub 2020 Jan 23. PMID: 31974914.
- Ohkusa T, Takashimizu I, Fujiki K, Suzuki S, Shimoi K, Horiuchi T, Sakurazawa T, Ariake K, Ishii K, Kumagai J, Tanizawa T. Disappearance of hyperplastic polyps in the stomach after eradication of Helicobacter pylori. A randomized, clinical trial. Ann Intern Med. 1998 Nov 1;129(9):712-5. doi: 10.7326/0003-4819-129-9-199811010-00006. PMID: 9841603.

2 MINUTES TO CONFER WITH MENTORS

SUPER BOWL TRIVIA

What teams have won the most Super Bowls?

Pittsburgh Steelers
and
New England Patriots
(6 each)

What 4 teams haven't appeared in a single Super Bowl?

Cleveland Browns,
Detroit Lions,
Houston Texans and
Jacksonville Jaguars

What team has participated in the most Super Bowl games?

New England Patriots (11)

Which player has the most Super Bowl rings in history?

TOM BRADY (7)

How many chicken wings are consumed on Super Bowl Sunday?

1.8 BILLION

How much do Americans spend on beer on Super Bowl Sunday?

$1.8 BILLION

How much did a ticket to the very first Super Bowl cost?

$12

WHO IS THE MOST FAMOUS SUPERBOWL COUPLE?


AFC CHAMPIONS
CHIEFS ARE
ALL IN

2 MINUTE REBUTTAL

DUKE UNIVERSITY SCHOOL OF MEDICINE

2 MINUTE REBUTTAL

UNC SCHOOL OF MEDICINE

JUDGES QUESTIONS

North Carolina Society of Gastroenterology
2024 Annual Meeting

DEBATE 3

Moderator: Wood Gibbs, MD

Case 3 Debaters

Hamid Reza Moein, MD

Second year fellow
UNC Health Blue Ridge

Faculty Mentor:
Matthew T. Mishoe, DO

Hassam Ali, MD

First year fellow
ECU Brody School of Medicine

Faculty Mentor:
Kara Regan, MD

Case 3

- AH is an 81 year old female referred to your GI practice for consideration of continued colorectal cancer screening.
  - Her last colonoscopy was 5 years ago at which time she had 2 tubular adenomas removed (each <1cm in size).
  - In review of available records, she has had a total of 6 subcentimeter adenomas removed over 3 prior colonoscopies
  - She has a first degree family history of colon cancer in her brother who was diagnosed at 75 years of age.

- AH has a history of coronary artery disease with single vessel PCI 3 years ago and is on aspirin monotherapy
  - She has no clinical history of heart failure
  - Well controlled T2DM, Hgb A1C 6; BMI of 23
  - Walks 1.5 miles three days a week.

- When asked about her feelings of continued screening, she states “whatever you think Doc.”

- What is the value and risks/benefits of continued colorectal screening in this patient??

Pro colonoscopy

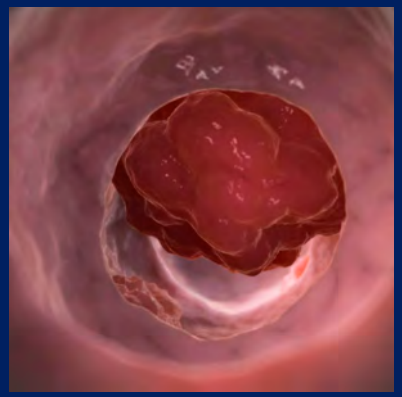
5 Minutes

Hamid Reza Moein, MD

Second year fellow
UNC Health Blue Ridge

Faculty Mentor:
Matthew T. Mishoe, DO

CASE BREAKDOWN



Eligibility

Eligible

CRC Risk

High-Risk

Risk vs. Benefit

Benefit > Risk

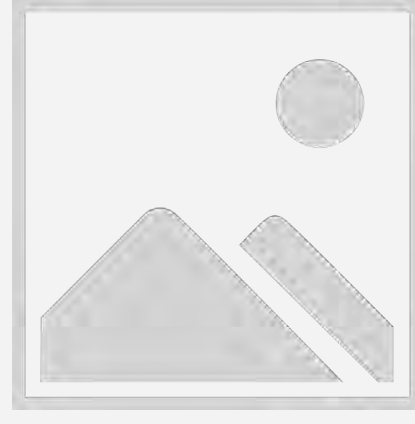
Images from: Gatsroenteroloadvisors.com; Vectorstock.com, Franklinfoodbank.org

IMAGE FROM: FREEPNGLOGOS.COM

IMAGES FROM: FREEPNGLOGOS.COM, FRIENDLYSTOCK.COM, PINTEREST.COM

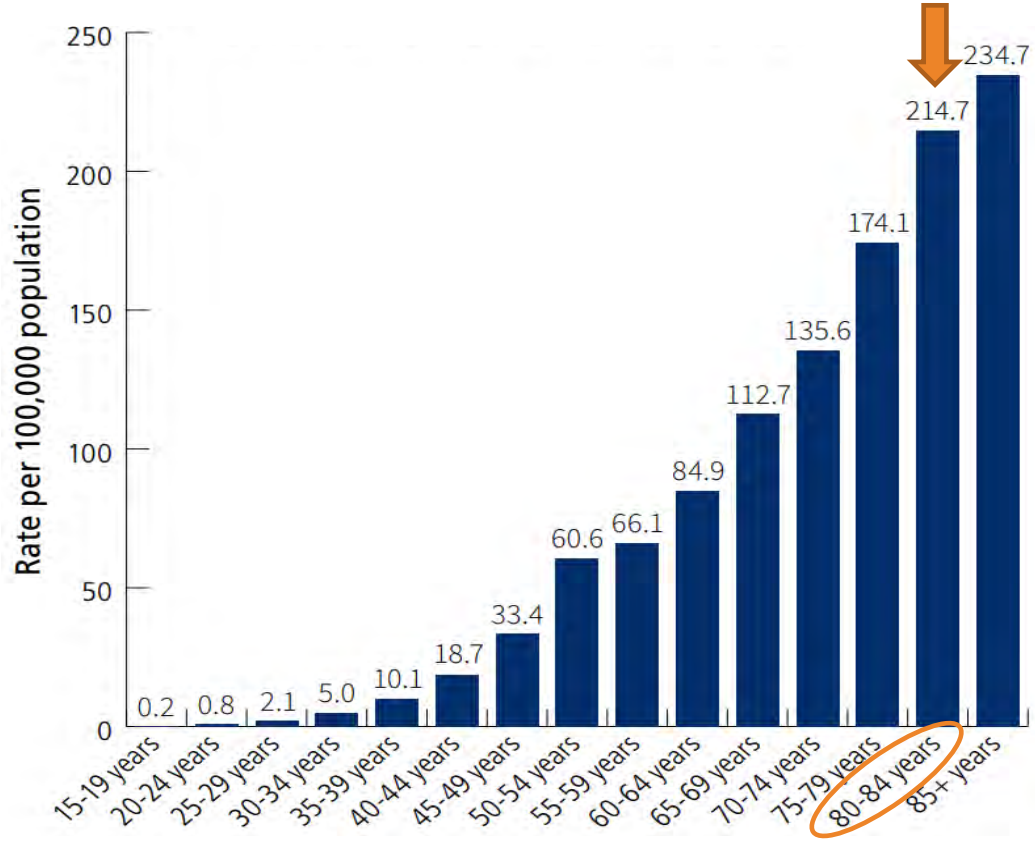
AGE TO STOP **SCREENING COLONOSCOPY**

Age	Recommendation/Grade
76-85	Offer selectively Individualize based on health, prior screening, preferences/ C
ACG	
MSTF >75	Consider stopping for individuals with negative prior high-quality colonoscopy/screening tests or when life expectancy is less than 10 years/ C



USPSTF 2021: JAMA. 2021;325(19):1965-1977; US MULTI SOCIETY TASK FORCE UPDATE 2022: GASTROENTEROLOGY. 2022; 162(1): 285-299; AJG116(3):458-479, MARCH 2021

RISK OF COLORECTAL CANCER INCREASES BY AGE



American Cancer Society. Colorectal Cancer Facts & Figures 2023-2025

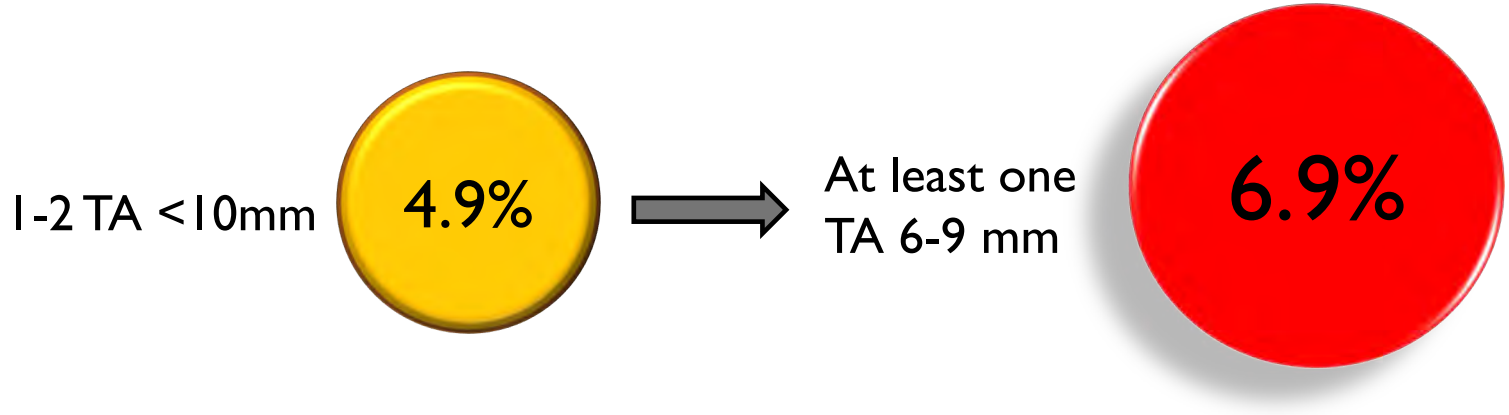
RISK OF CRC IS >100% HIGHER WITH AFFECTED FDR

Factors that increase risk:	Relative Risk*
Heredity and medical history	
Family history	
At least 1 first-degree relative	2.2
At least 1 first-degree relative with diagnosis before age 50	3.6
More than 1 first-degree relative relative	4.0
At least 1 second-degree relative	1.7
Inflammatory bowel disease	1.7
Type 2 diabetes	
Male	1.4
Female	1.2†

American Cancer Society. Colorectal Cancer Facts & Figures 2023-2025

RISK OF COLORECTAL CANCER WITH ADENOMA

Risk of metachronous adenocarcinoma in 3-5 Y



AJG 2017;112:1790–1801; GASTROINTEST ENDOSC. 2020 MAR;91(3):614-621.E6.

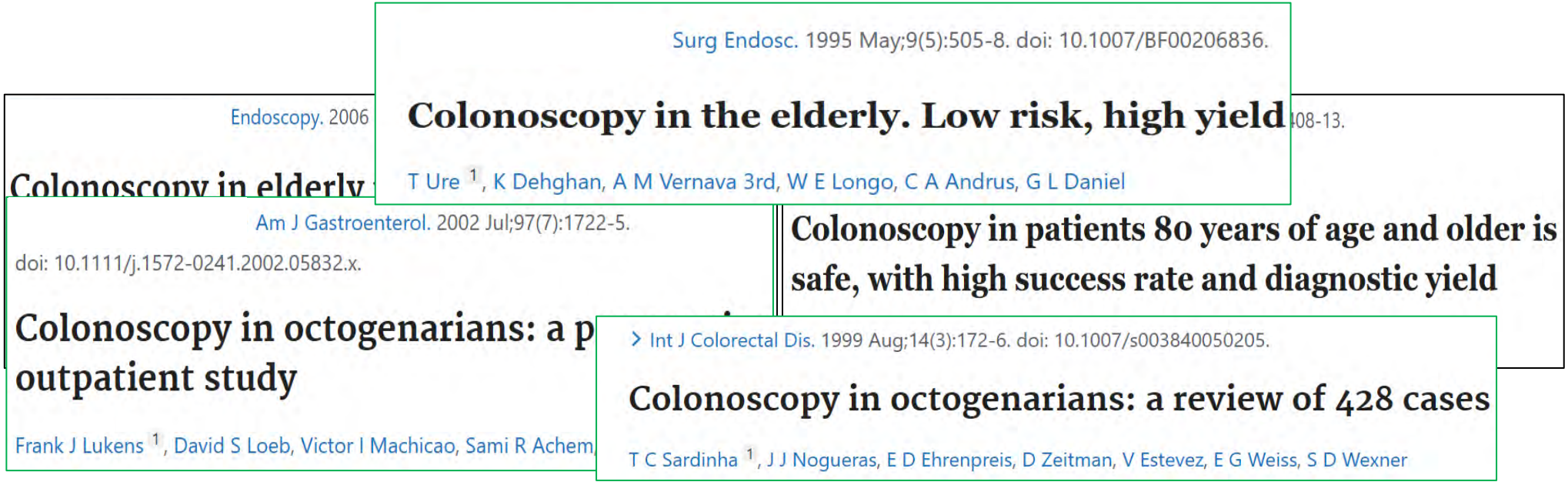
RISK OF ADVANCED ADENOMA

Advanced adenoma % at second surveillance

Baseline finding	First surveillance finding	Morelli et al, 2013[55] (n = 965)	Park et al, 2015[56] (n = 2087)
LRA	No adenoma	6.6	6.0
	LRA	13.8	10.6
	HRA	18.0	16.4

AJG 2020; 115(3):415-434.

COLONOSCOPY IN ELDERLY IS SAFE



- Prospective studies show that colonoscopy in octogenarians is **safe** and without major adverse events.

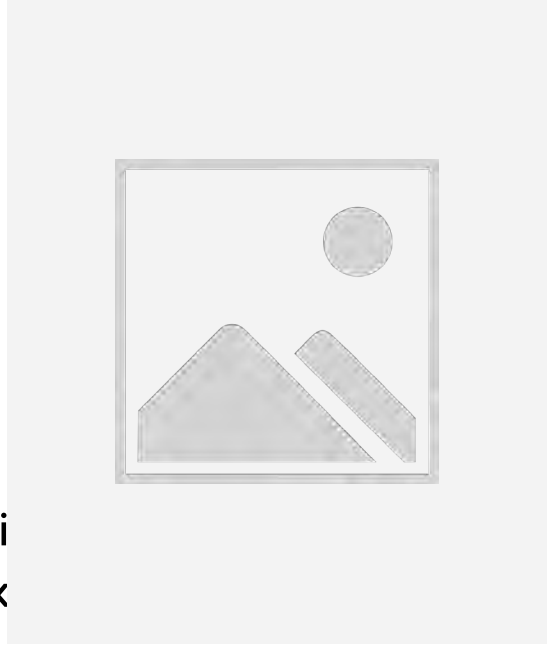
LIFE EXPECTANCY: ePROGNOSIS- LEE INDEX

Points	Life Expectancy (years)
0 - 1	33.1 - 35.4
2 - 3	23.7 - 30.1
4 - 5	17.7 - 21.1
6 - 7	12.6 - 14.3
8 - 9	8.9 - 10
10 - 11	5.0 - 7.2
12 - 13	3.8 - 5.1
≥14	2.9

HTTPS://EPROGNOSIS.UCSF.EDU/LEESCHONBERG-RESULT.PHP.

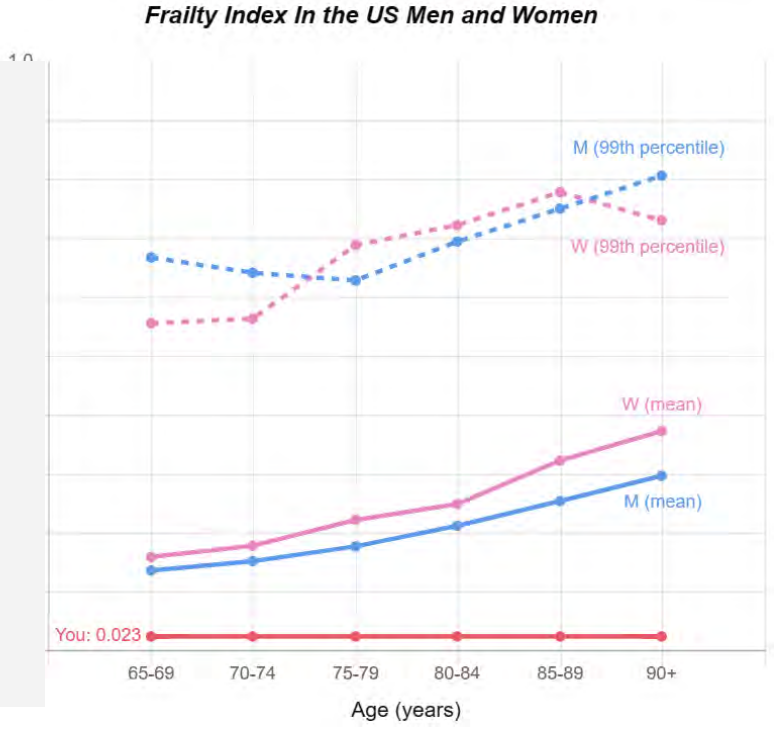
FRAILTY

- Score ranges 0-1
- < 0.15 = Robust/Not frail
- > 0.25 = Frail
- Comprehensive geriatri assessment frailty index



Not Frail

YOUR FRAILTY INDEX: 0.023 (ROBUST)



SENIOR HEALTH CALCULATOR: ONLINE TOOL FOR PROVIDERS. WWW.BIDMC.ORG; DIG DIS SCI. 2018 DEC;63(12):3272-3280.

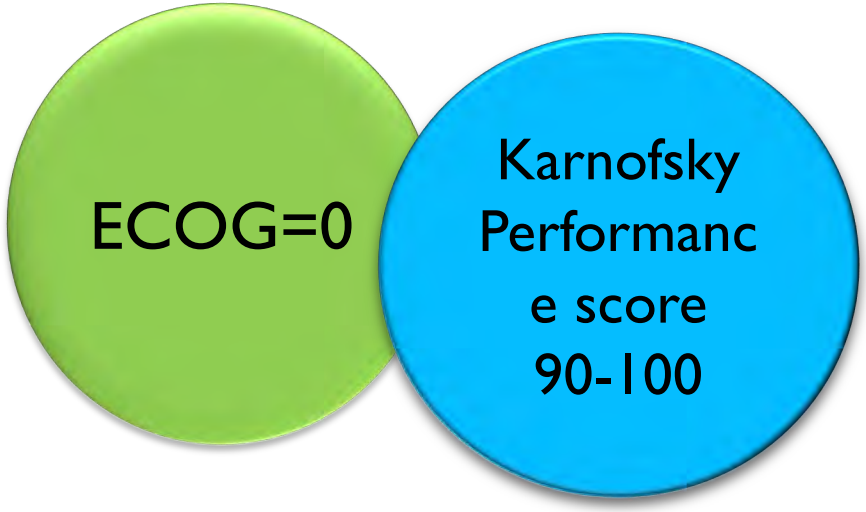
FRAILTY IS ASSOCIATED WITH COLONOSCOPY COMPLICATIONS

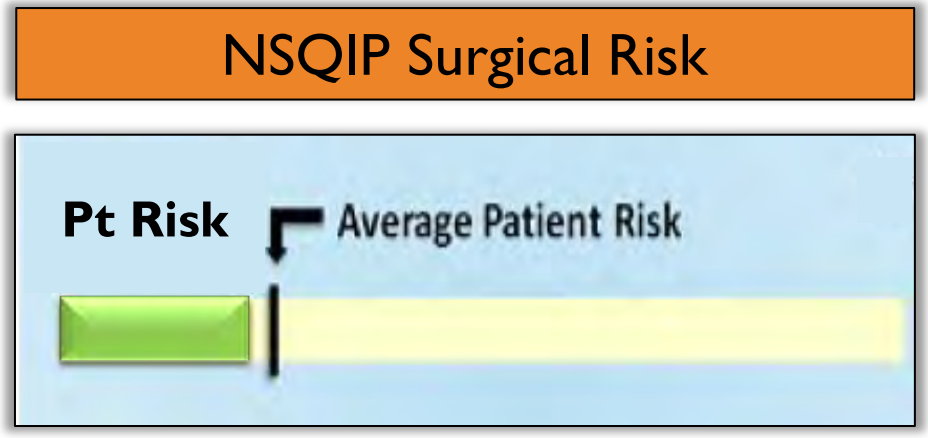
Independent variable	Chi-square	*p* value	CI
Logistic regression			
Age	0.30	0.58	(−0.06) – (0.03)
Frailty categories[a]	6.10	0.01*	(0.11) – (0.95)
Comorbidity score[a]	1.71	0.19	(−0.36) – (0.07)
ASA score[a]	5.31	0.02*	(−1.49) – (−0.11)

- Frailty more accurately predicts adverse outcomes as compared to age alone.

DIG DIS SCI. 2018 DEC;63(12):3272-3280.

PERFORMANCE STATUS





- Good performance scores will allow potential chemotherapy in case of CRC diagnosis
- Our patient has below average surgical complication risk. Surgery outcomes in patients diagnosed with CRC >75 y/o were excellent with only 2% mortality.

ECOG-ACRIN.ORG, CLIN COLORECTAL CANCER. 2022 JUN;21(2):E113-E116.

National Surgical Quality Improvement Program. https://riskcalculator.facs.org/RiskCalculator

High Risk for CRC

Not

Life Expectancy >10 y

Low risk of Procedure

SUMMARY

After shared making we concluded that the benefit fr oscopy outweighs the risk; therefore, v p ceed with colonoscopy.

THANK YOU

Hamid Reza Moein, MD

Matthew T Mishoe, DO

Hamidreza.moein@unchealth.unc.edu

UNC HEALTH Blue Ridge

Pinterest.c
a

No colonoscopy

5 Minutes

Hassam Ali, MD

First year fellow
ECU Brody School of Medicine

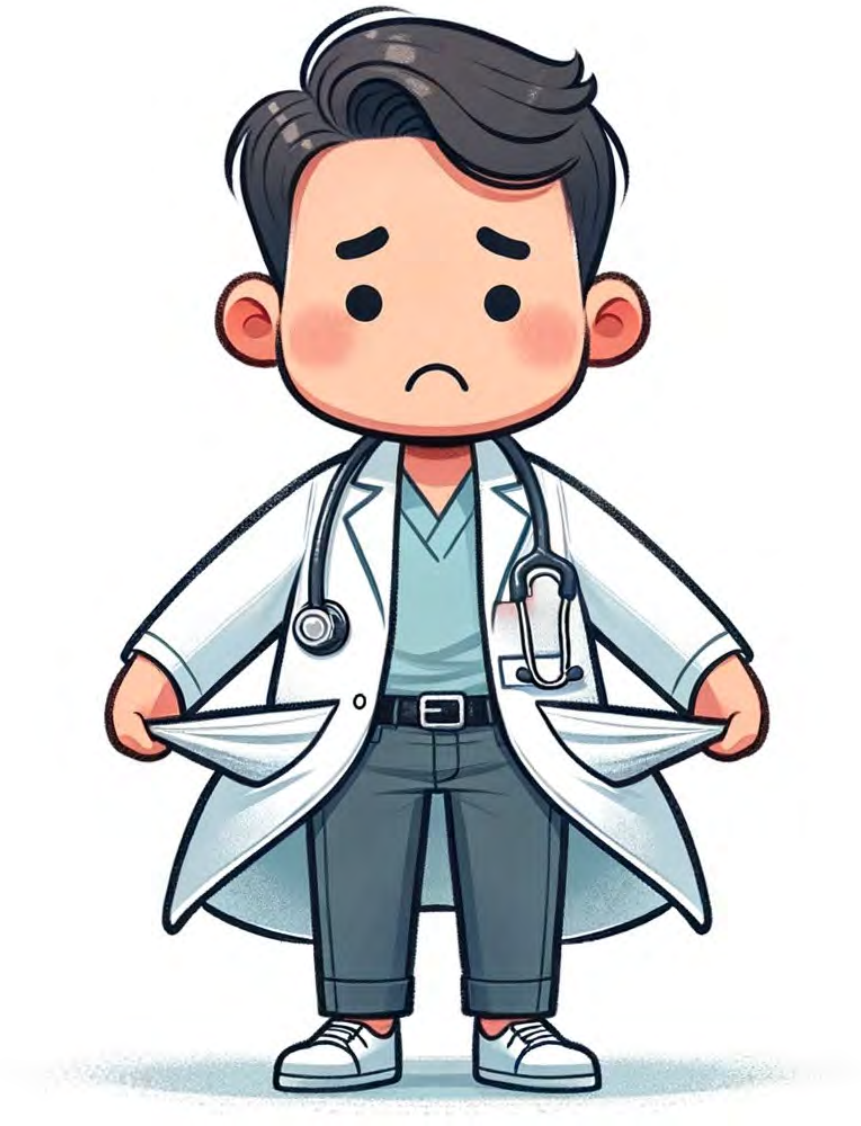
Faculty Mentor:
Kara Regan, MD

Do You *Really* Want to Scope an 81-year-old Female With Coronary Arterial Disease and Sub-centimeter Polyps?

Hassam Ali, MD
ECU Health Medical Center
Department of Gastroenterology & Hepatology PGY-IV

Financial Disclosures

I am ~~a fellow~~ Poor.



Guidelines: She is NOT Due for a Colonoscopy.

Next surveillance per current guidelines: 83 -86 years.

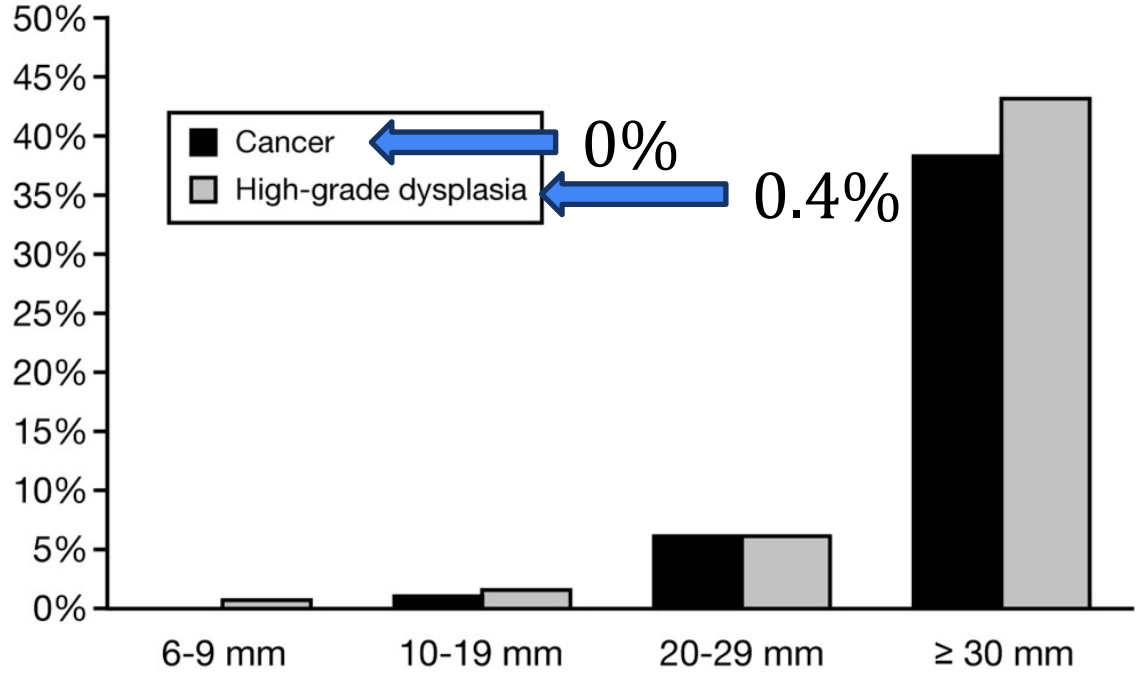
AGA/ U.S. Multi-Society Task Force : 1-2 tubular adenomas <10 mm in size, repeat colonoscopy in 7-10 years.

American Cancer Society: For people ages 76 through 85→ Maybe; People over 85→Stop.

ESGE: 1–4 <10mm adenomas with low grade dysplasia, irrespective of villous components, or any serrated polyp <10mm without dysplasia; Returned to screening.

Gupta S et al Gastrointest Endosc. 2020;91(3):463-485.e5.
Hassan C et al. European Society of Gastrointestinal Endoscopy (ESGE) Guideline - Update 2020. Endoscopy. 2020;52(8):687-700.
https://www.cancer.org/cancer/types/colon-rectal-cancer/detection-diagnosis-staging/acs-recommendations.html

Low rates of cancer or high-grade dysplasia in <1 cm polyps



Pickhardt PJ, Hain KS, Kim DH, Hassan C. Low rates of cancer or high-grade dysplasia in colorectal polyps collected from computed tomography colonography screening. Clin Gastroenterol Hepatol. 2010;8(7):610-615.

Previous Colonoscopy by

Dr. Mank (GI program director at UNC Blue Ridge)

Excellent adenoma detection rate!

Her family history? NOT Significant

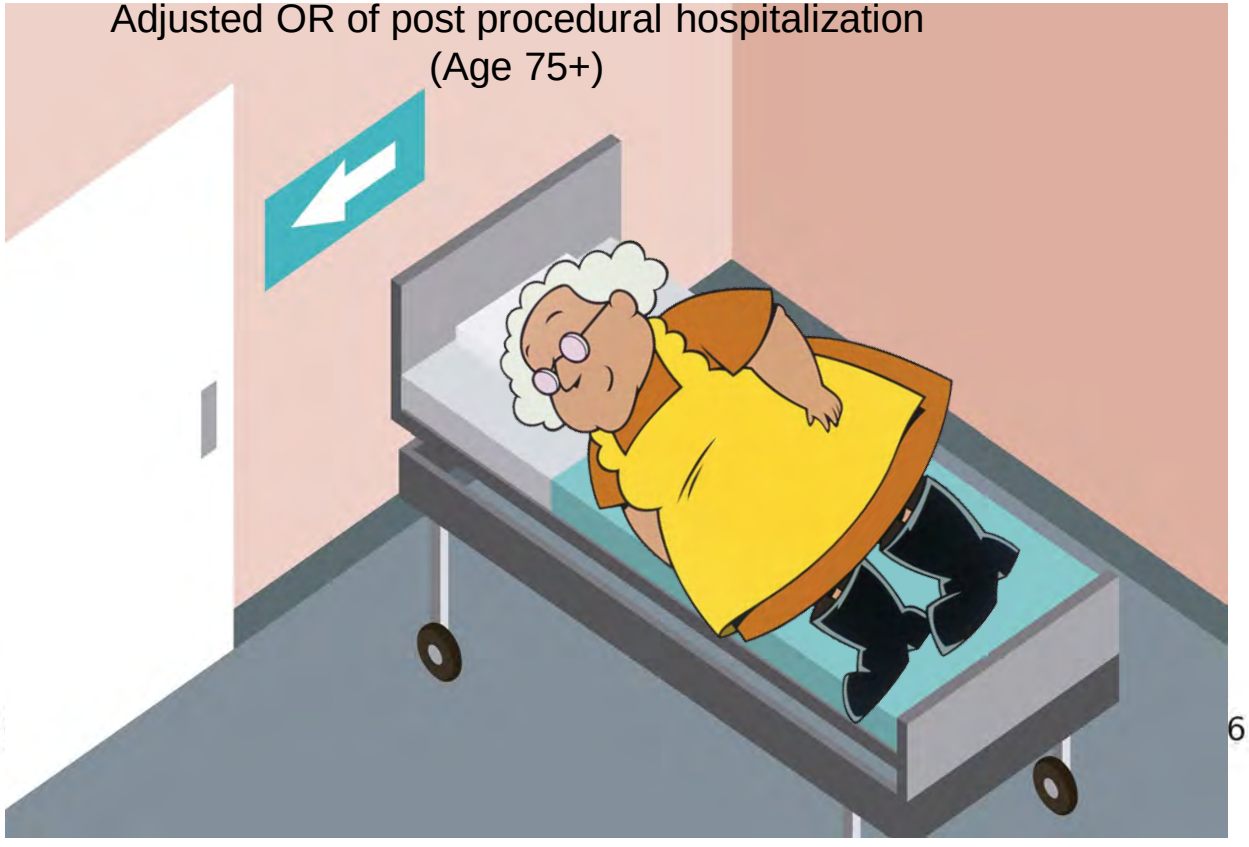
First degree relative is <60, or ≥ **TWO** First degree relatives with CRC or advanced colorectal polyps at any age

If first degree relative ≥ 60 years or older, follow average risk intervals.

First degree relative diagnosed at >70 or 60-69 with CRC:
No increase in incidence CRC (P =0.18), **No** increase in CRC related mortality (P=0.81)

Shaukat A et al Am J Gastroenterol. 2021;116(3):458-479.
Schoen RE et al. Gastroenterology. 2015;149(6):1438-1445.e1.
https://fascrs.org/healthcare-providers/education/clinical-practice-guidelines

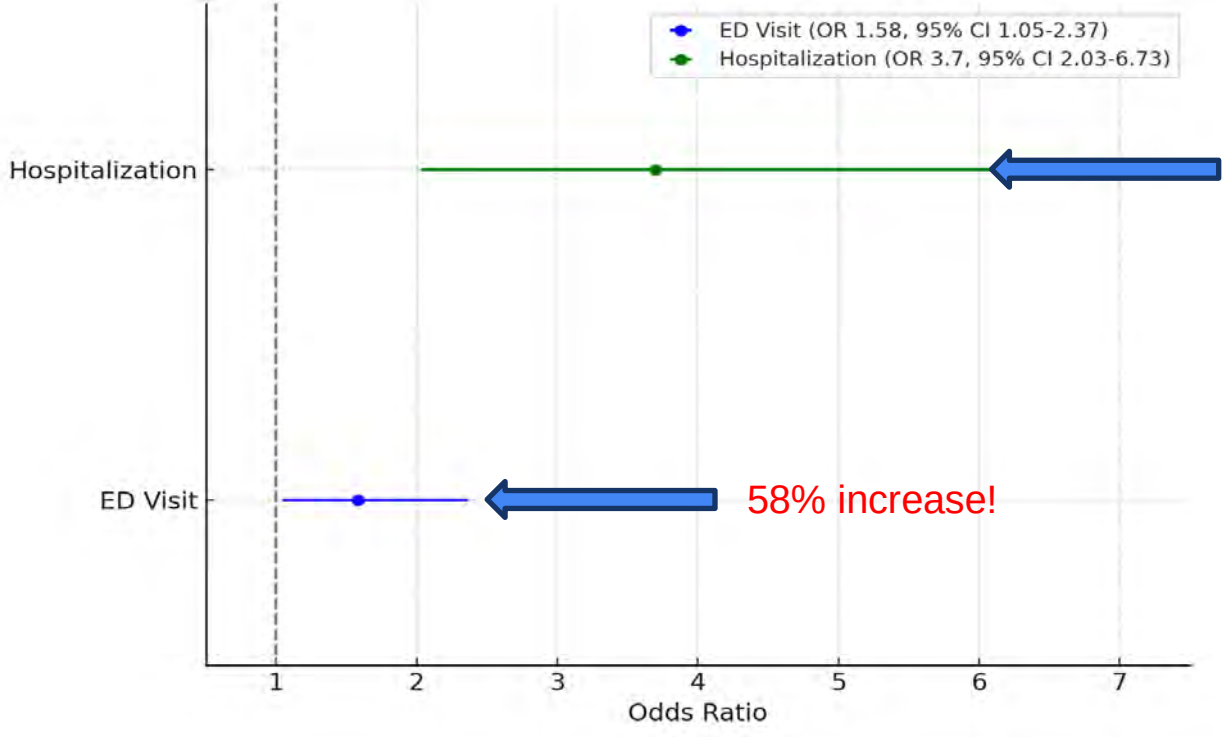
A Higher Rate of **30-day** Post Procedural Hospitalizations w



Tran AH et al. JAMA Intern Med. 2014;174(10):1675-1682.

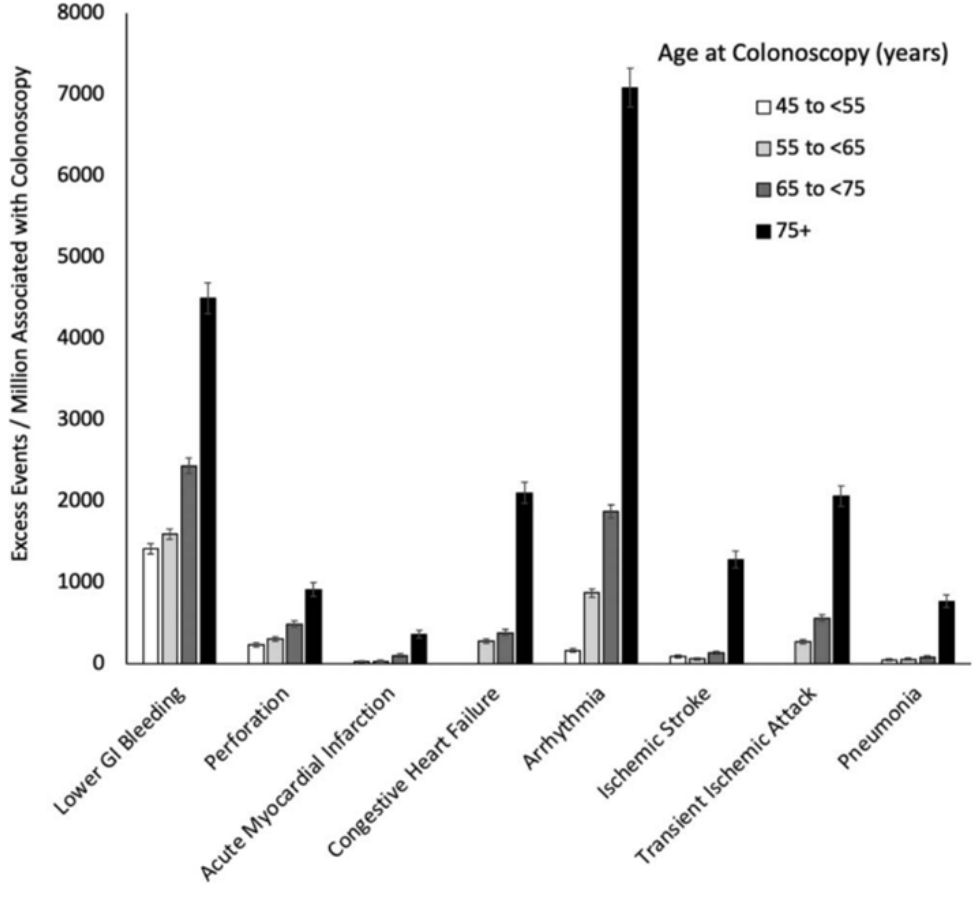
A Higher Rate of **7-day** Post Procedural ED Visits

Adjusted OR for outcomes within 7 days of colonoscopy (Age 75+ years)



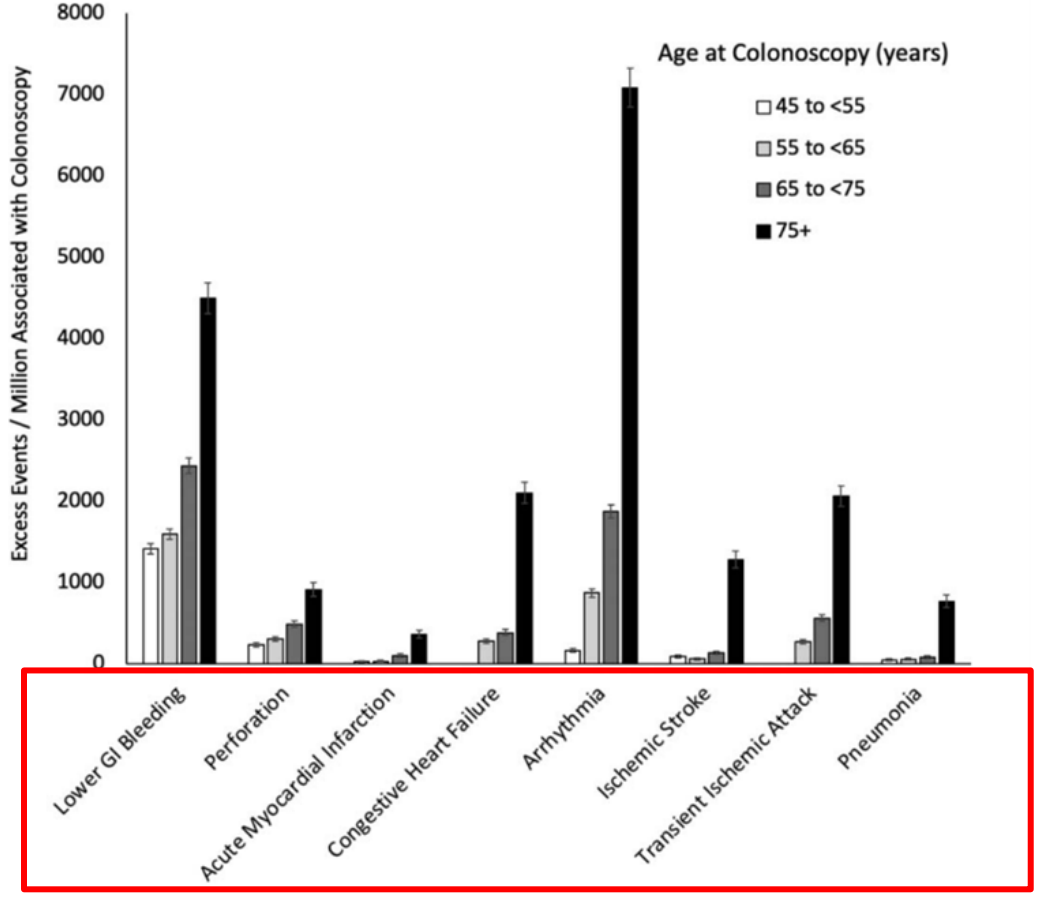
Grossberg LB et al. Dig Dis Sci. 2020;65(7):1964-1970.

Complications?



Ladabaum U et al. Am J Gastroenterol. 2021;116(12):2430-2445

Complications? Of Course!!



Ladabaum U et al. Am J Gastroenterol. 2021;116(12):2430-2445

No Risk Reduction in CRC Death from Colonoscopy Post-75 in Cardiovascular Patients

Significant Comorbidities

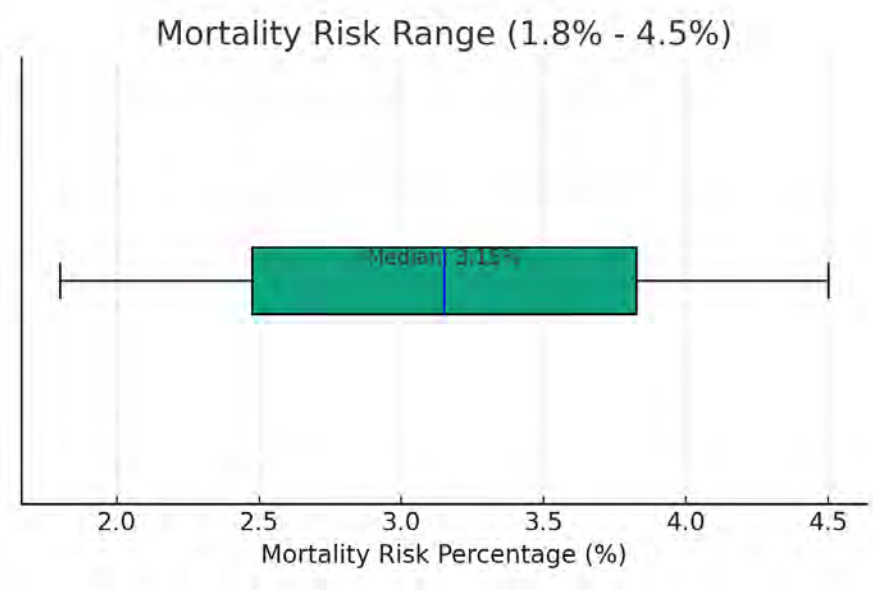
Cardiovascular Disease

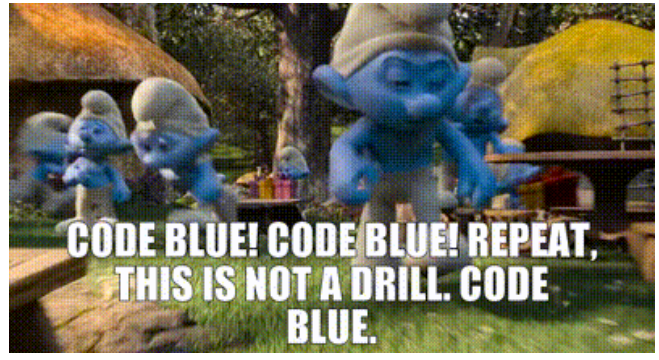
0.

Ma W et al. JAMA Oncol. 2021;7(7):985-992. doi:10.1001/jamaoncol.2021.1364

ASA Risk III

History of CAD/stents





Daabiss M. American Society of Anaesthesiologists physical status classification. Indian J Anaesth. 2011;55(2):111

Charlson Comorbidity Index (CCI)

Predicts 10-year survival in patients with multiple comorbidities

Age: ≥80 years (4 points)

Myocardial Infarction: (1 point)

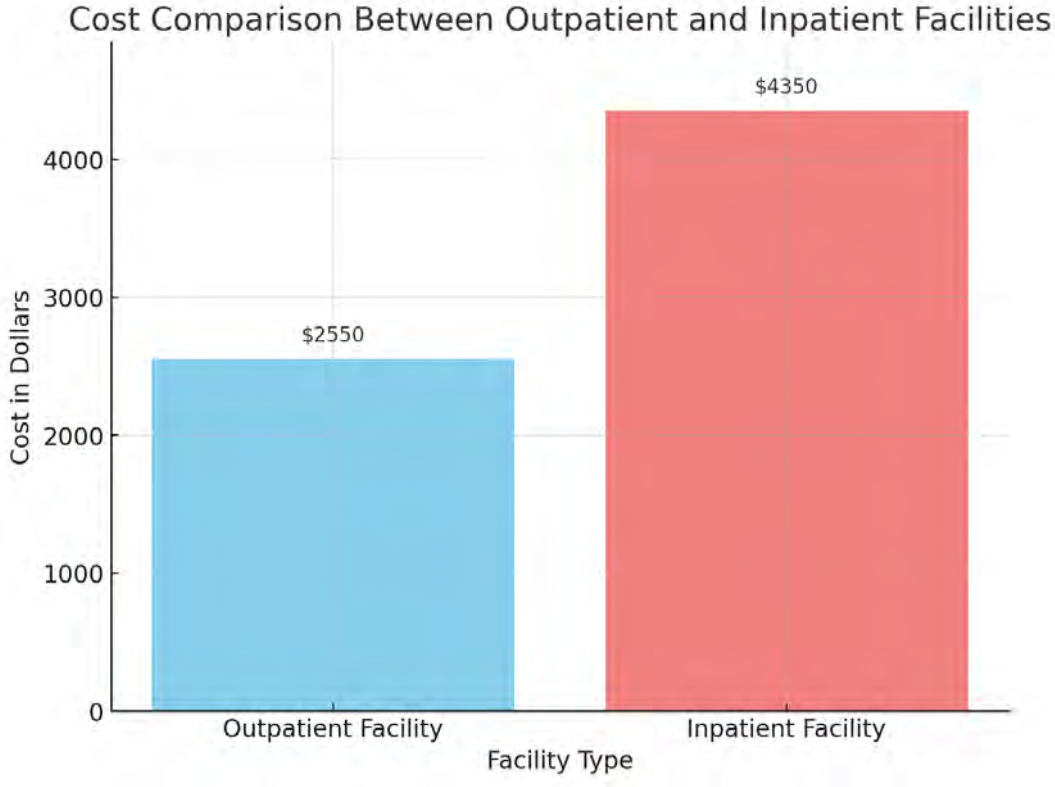
Diabetes Mellitus: Uncomplicated (1 point)

Total CCI Score: 6 points

Estimated 10-Year Survival: **2%**

https://www.mdcalc.com/

Cost



https://www.goodrx.com/conditions/colon-cancer/colonoscopy-cost

ECU HEALTH


BAKERY
OPEN

ECU HEALTH

Highlights

81-year-old, Due at 83/86

Has Ischemic CVD, T2DM

10-year Survival – 2%

Sub Centimeter Polyps

No Significant Family History

Trusts Your Judgement

I really hope the doctor says no….

NO Further Surveillance

Thank you

Confer with Mentors
2 Minutes

IT'S NOT ALL BUTTS AND GUTS

INTERNAL MEDICINE QUIZ

- What amount of proteinuria qualifies as nephrotic syndrome (per 24 hours)
  - A. 1 gram
  - B. 3.5 grams
  - C. 5 grams
  - D. 10 grams

B. 3.5 grams

IT'S NOT ALL BUTTS AND GUTS

INTERNAL MEDICINE QUIZ

- The American College of Cardiology defines Stage 1 Hypertension as
  - A. Systolic 120 to 129 mmHg and diastolic <80 mmHg
  - B. Systolic 130 to 139 mmHg and diastolic 80 to 89 mmHg
  - C. Systolic 130 to 139 mmHg and diastolic > 90 mmHg
  - D. Systolic > 140 mmHg and diastolic > 90 mmHg

B. Systolic 130 to 139 mmHg and diastolic 80 to 89 mmHg

IT'S NOT ALL BUTTS AND GUTS

INTERNAL MEDICINE QUIZ

- The American Diabetes Association criteria for the diagnosis of diabetes includes all the following except:
  - A. Hgb A1C $\geq$ 6.5%
  - B. Fasting plasma glucose $\geq$ 126 mg/dL
  - C. 2-hour plasma glucose $\geq$ 200 mg/dL during an oral glucose challenge
  - D. Random plasma glucose of 180 mg/dL

D. Random plasma glucose of 180 mg/ dL

IT'S NOT ALL BUTTS AND GUTS

INTERNAL MEDICINE QUIZ

- In atrial fibrillation, a CHA_2DS_2-VASC score of 7 carries a one year stroke/thromboembolism event risk of ____ without anticoagulation
  - A. 2%
  - B. 5%
  - C. 10%
  - D. 15%

C. 10%

IT'S NOT ALL BUTTS AND GUTS

INTERNAL MEDICINE QUIZ

- Contraindications to use of oral bisphosphonates in osteoporosis include all the following except:
  A. History of osteonecrosis of jaw
  B. Uncomplicated GERD
  C. CKD with GFR <30
  D. Roux-en-Y gastric bypass

B. Uncomplicated GERD

ECU Rebuttal – Dr. Ali

2 Minutes

Blue Ridge Rebuttal – Dr. Moein

2 Minutes

Judges Questions