Case Based Decision Making
Endo Skills 2025
Part 2: Lower GI Tract

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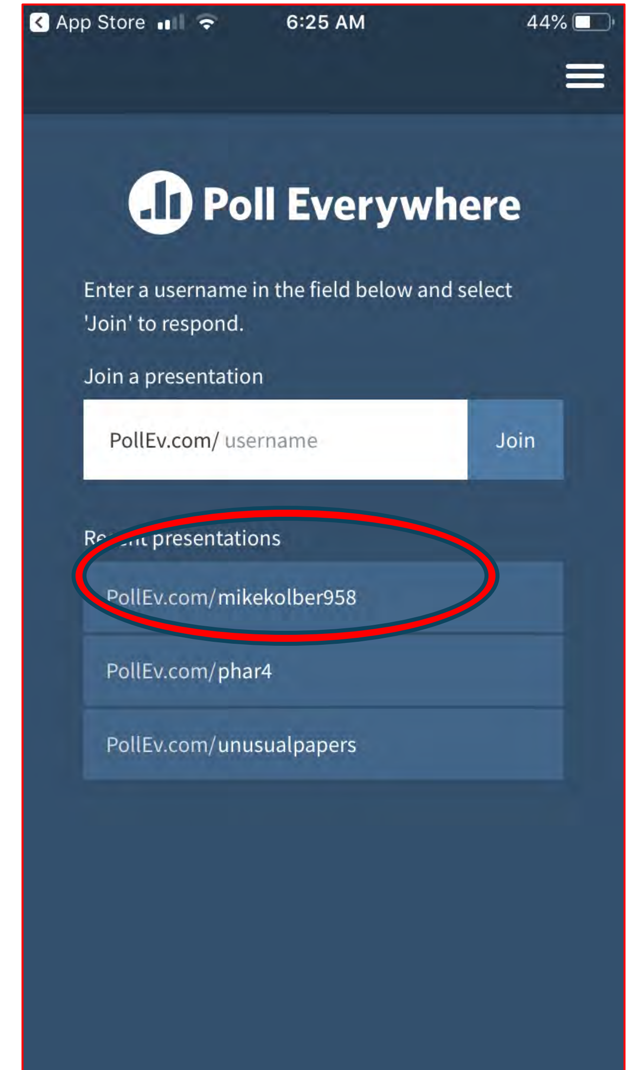
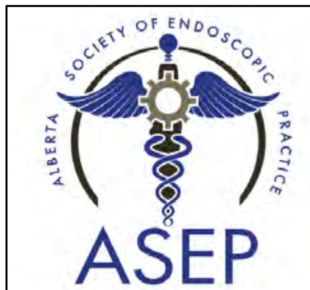
Peace River/Edmonton





Kolber Disclosure

- **Relationships with financial sponsors:**
  - **Grants/Research Support:** CIHR (BedMed Study)
  - **Expenses or Honoraria:**
    - ACFP, Alberta Health (Expert Drug), SRPC, AMA, CCFP
  - **Consulting Fees or Patents:** N/A
  - **Other:** Employee University of Alberta
    - EMPRSS: Electronic Medical Procedure Reporting Systems
    - Medical Director: Backcountry ski lodge

PEER PATIENTS EXPERIENCE EVIDENCE RESEARCH

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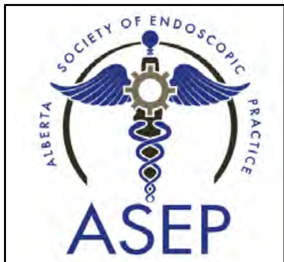
Bishay Disclosure

- **Relationships with financial sponsors:** N/A
  - **Grants/Research Support:** N/A
  - **Expenses or Honoraria:** N/A
  - **Consulting Fees or Patents:** N/A
  - **Other:** Therapeutic Endoscopist, Royal Alexandra Hospital, Edmonton



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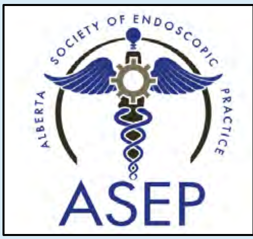
Learning Objectives



Critical Thinking in Endoscopy:

- Apply critical thinking for diagnostic and treatment options in endoscopic scenarios.

Advanced Endoscopic Techniques and Planning:

- Identify appropriate steps for polypectomy including initial assessment and post-removal management.
- Reflect upon when to consider advanced endoscopists.

Surveillance:

- Develop surveillance plan based on lesion size, removal and pathology.

Collaborative Practice:

- Recognize the value of collaboration in managing endoscopic cases

Patient Consent

- All patients have provided consent to share their stories / pictures

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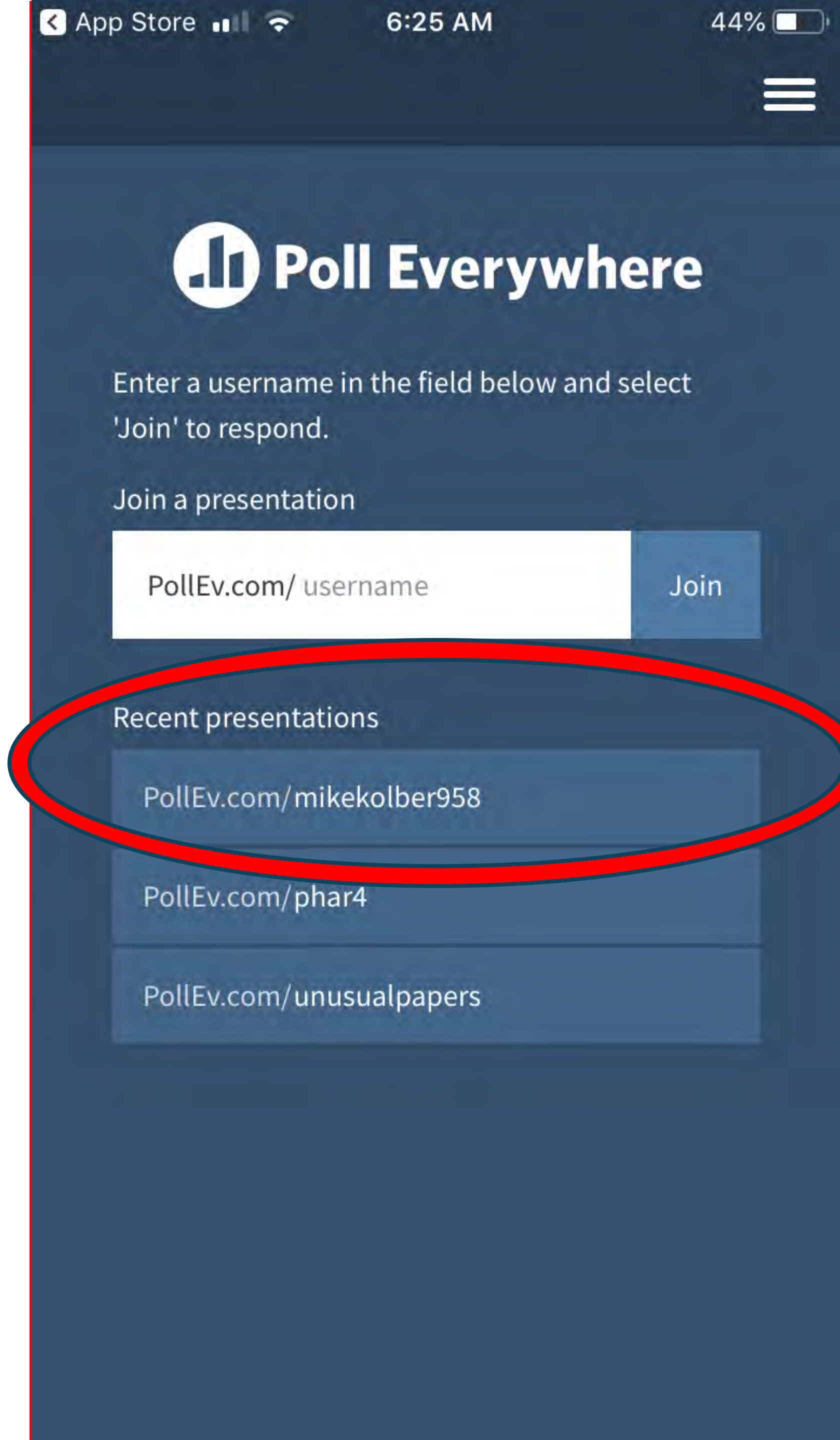
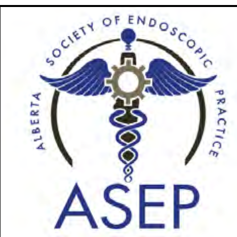
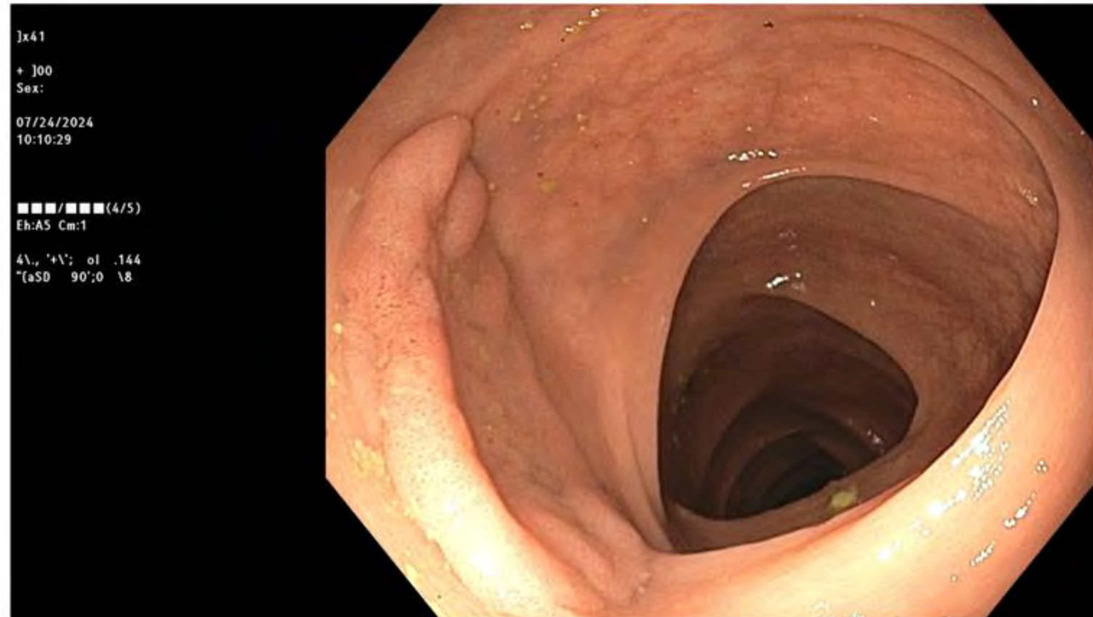




Case 6: Who/where/when perform polypectomy?

- 50 yo ♀FIT positive. Occasional chronic abd cramps. No FHx CRC, no meds. Hysterectomy for cervical cancer.
- Index colonoscopy Peace River: Hepatic flexure/transverse colon lesion



Polyp; Hepatic Flexure

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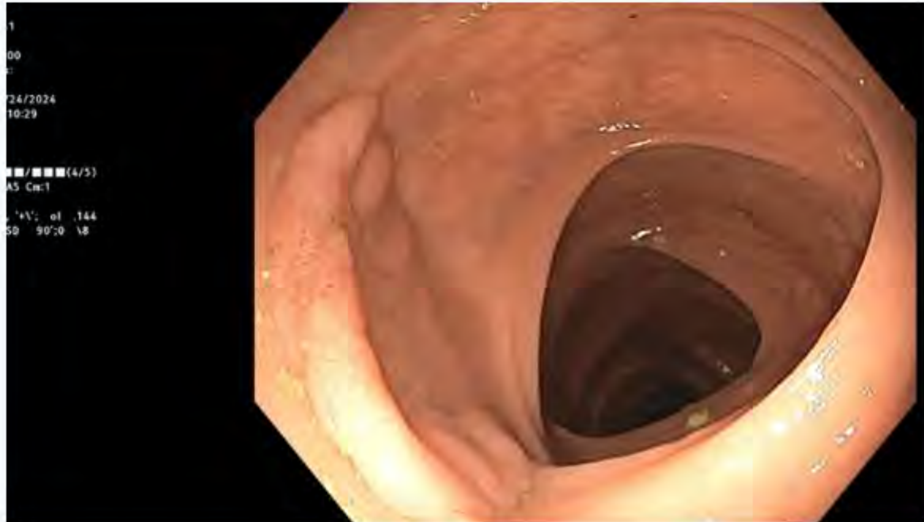
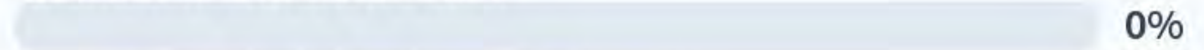
Case 6: Who/where/when perform polypectomy? What do you wish to do during the scope?



Estimate the size of the lesion

 0%

Have a closer look: far, close and closer pics

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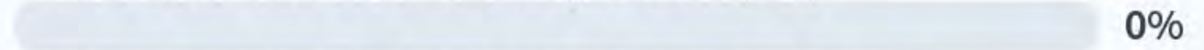
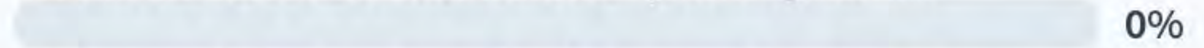
Have a closer look: use different light source (NBI)

 0%

Determine exact location and consider providing a tattoo

 0%

If concerned about an area of the lesion, consider a biopsy

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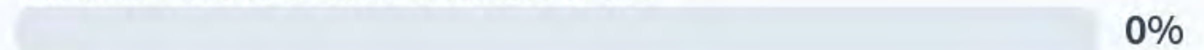
All of the above seem reasonable to me

 0%

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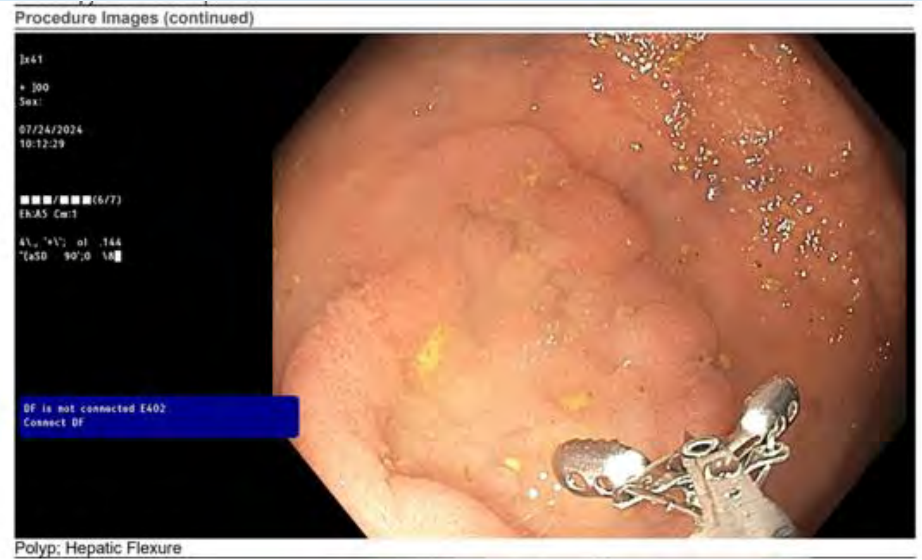
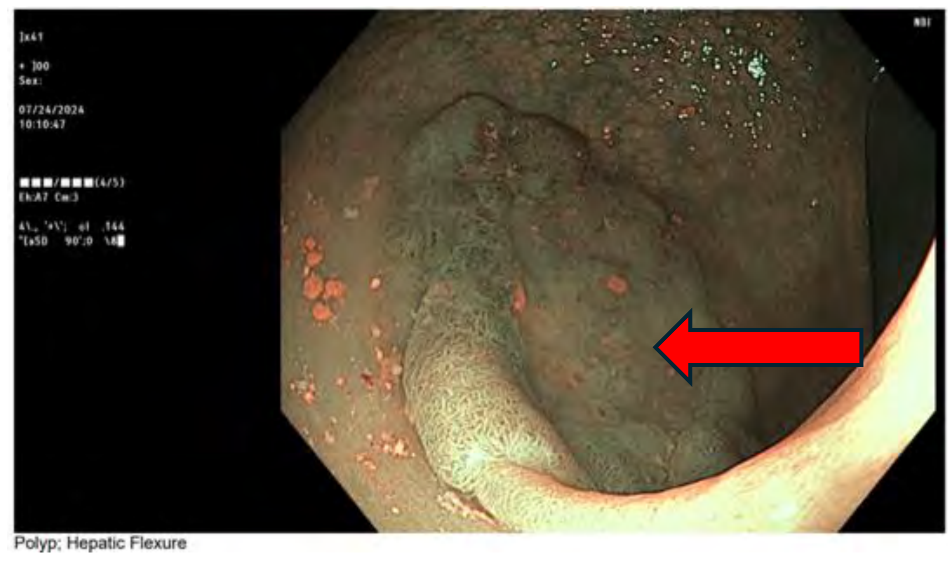
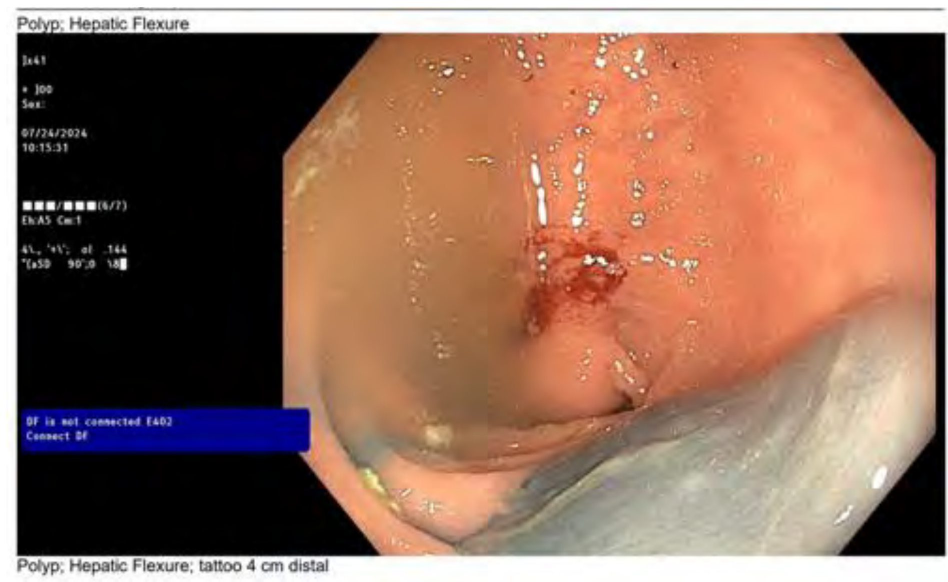
Case 6: Who/where/when perform polypectomy?







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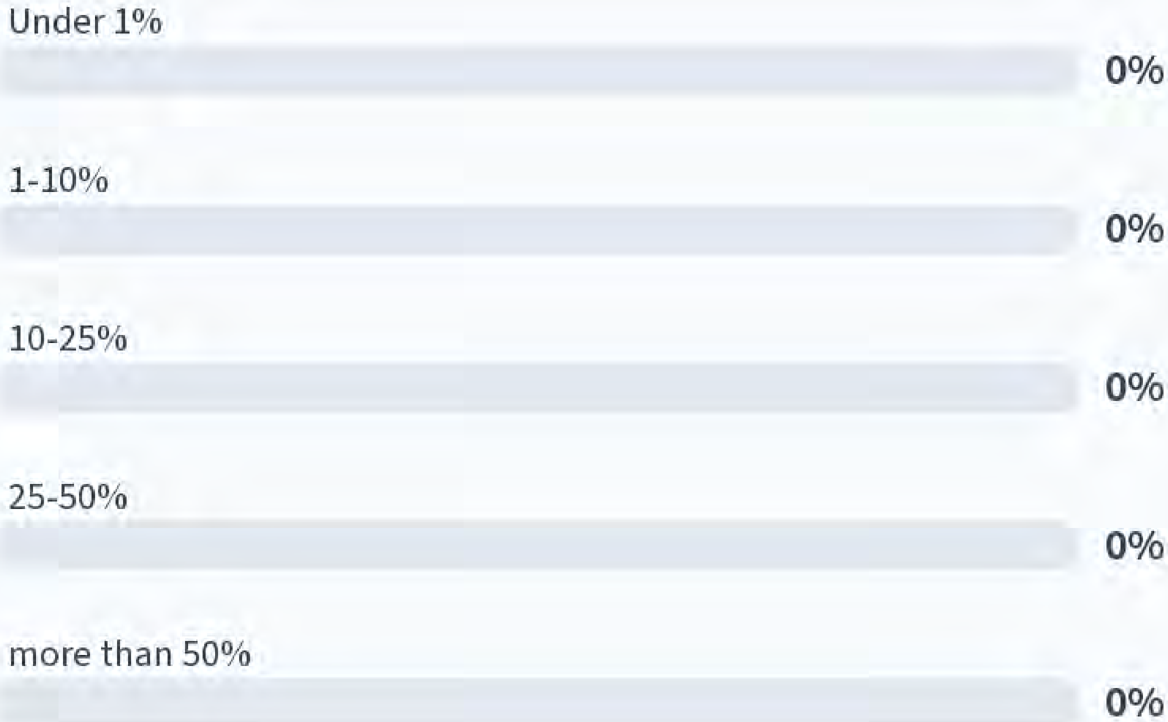
Case 6: What is your best estimate of cancer risk of this lesion?



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Case 6: Given lesion appearance and location, what's the risk of cancer?

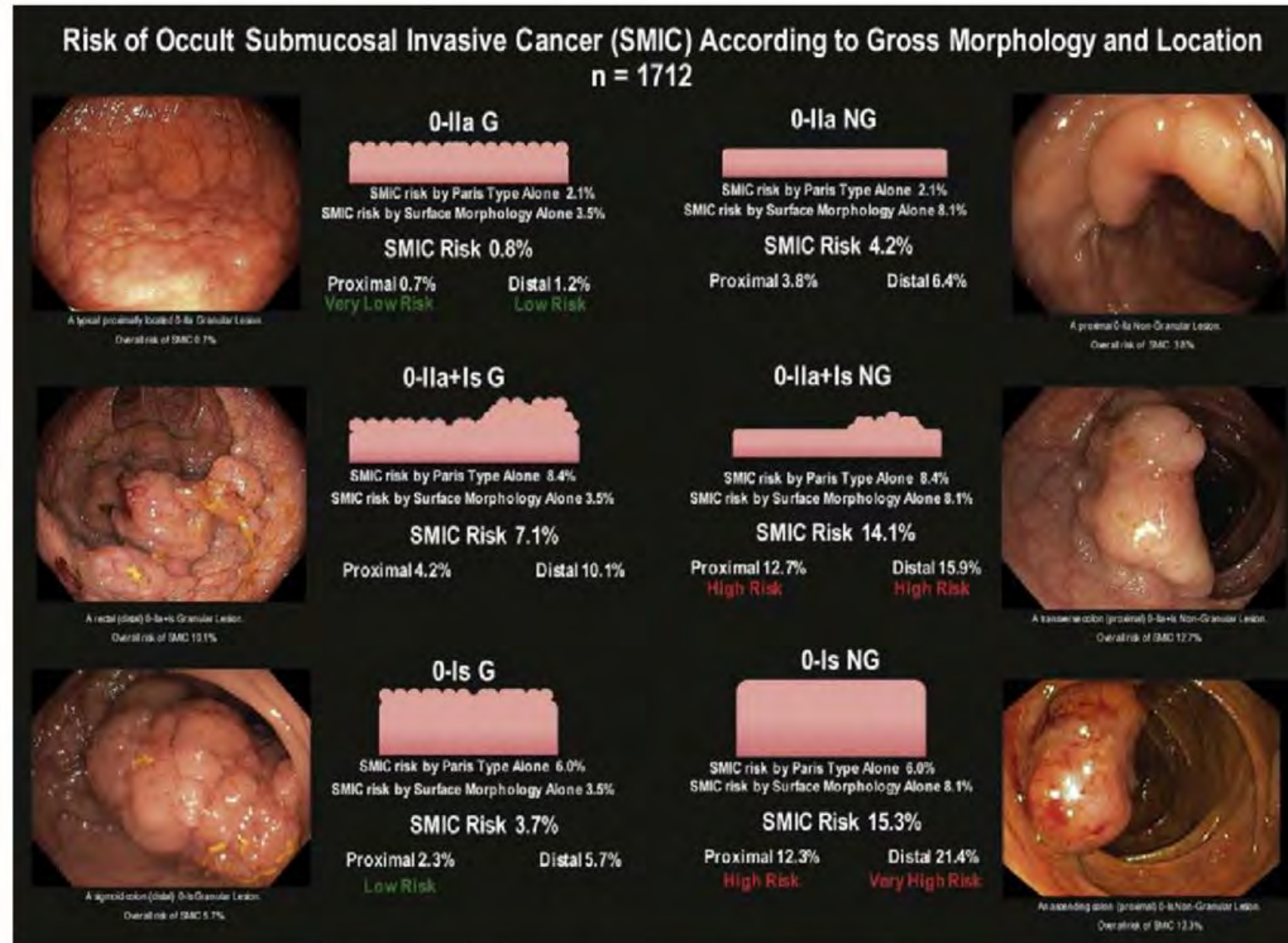

Figure 1. Risk of occult SMIC according to gross morphology and location (n = 1712).

Burgess, Gastroenterology 2017;153:732–742

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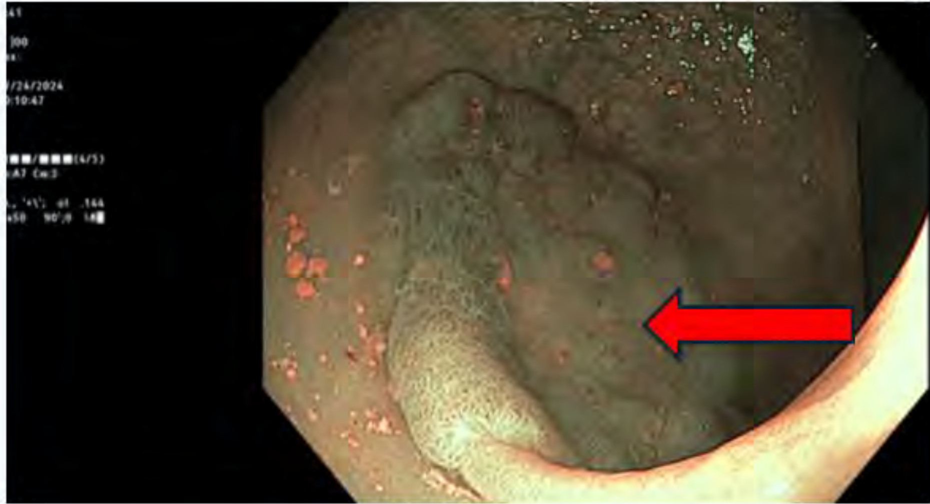
Case 6: Biopsy = Tubulovillous adenoma. What would you do now?



Send to the surgeon as it must be cancer

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Bring her back to your facility for repeat colon and resection

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Send her to your friendly advanced endoscopist for removal

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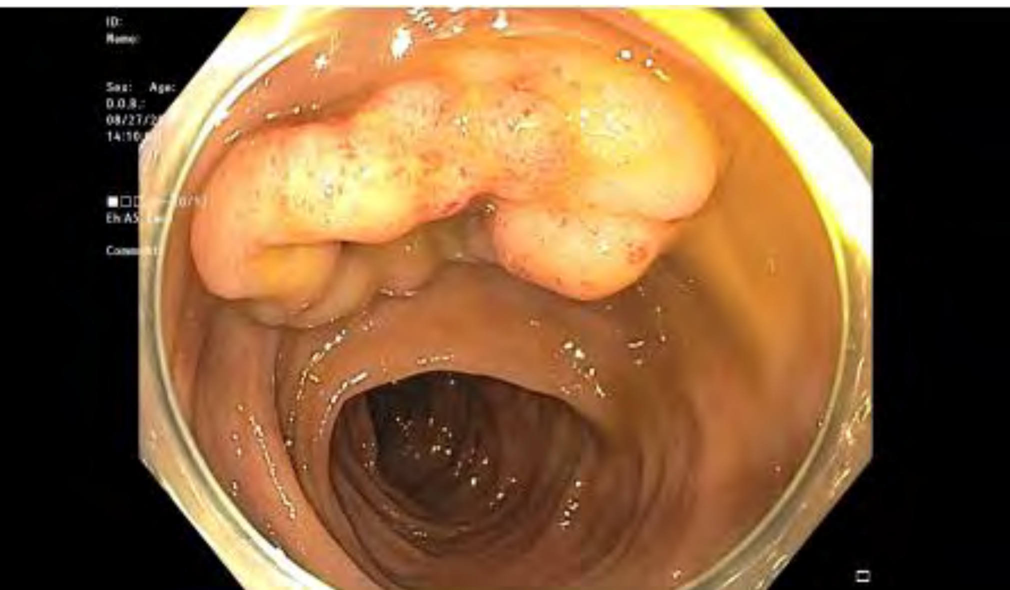
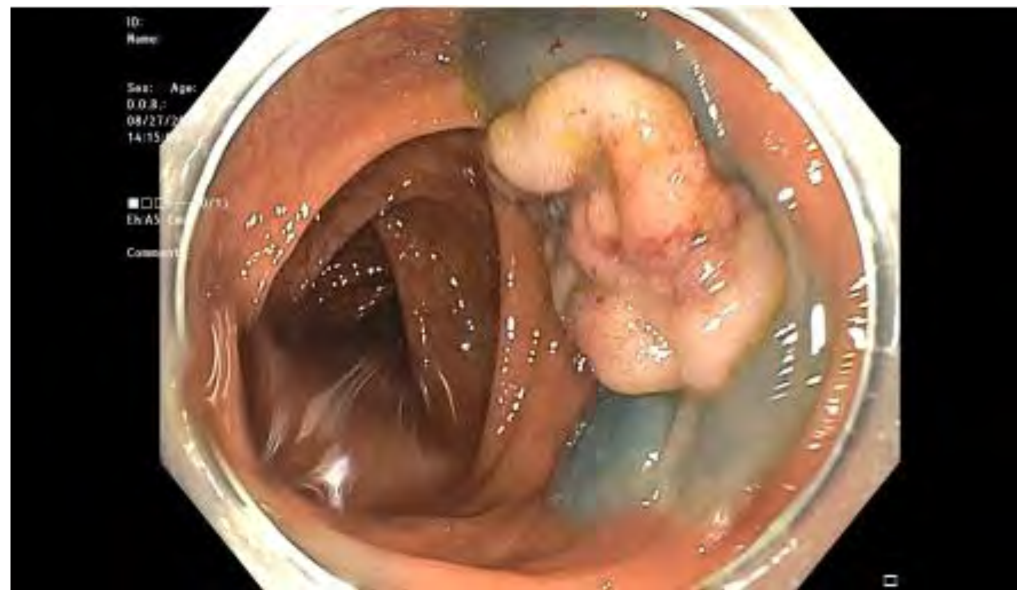
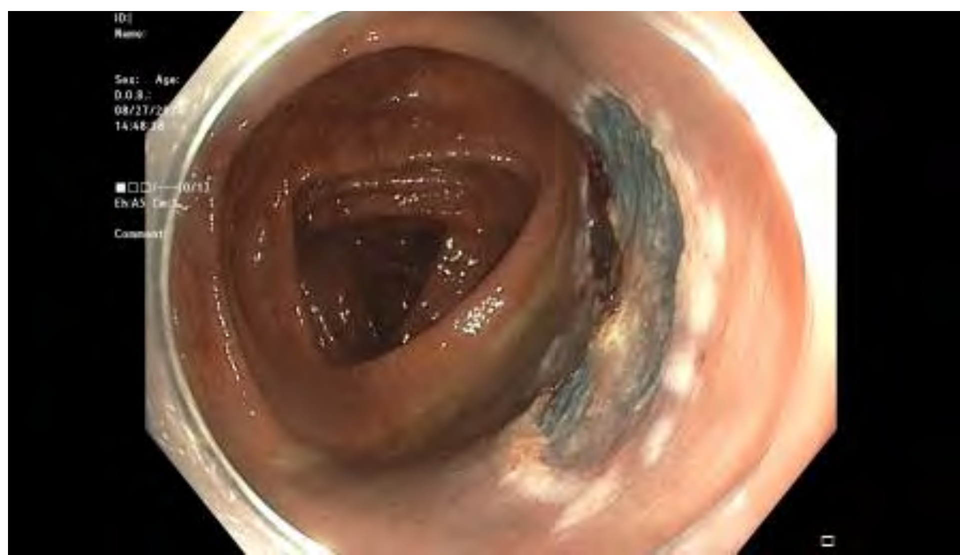
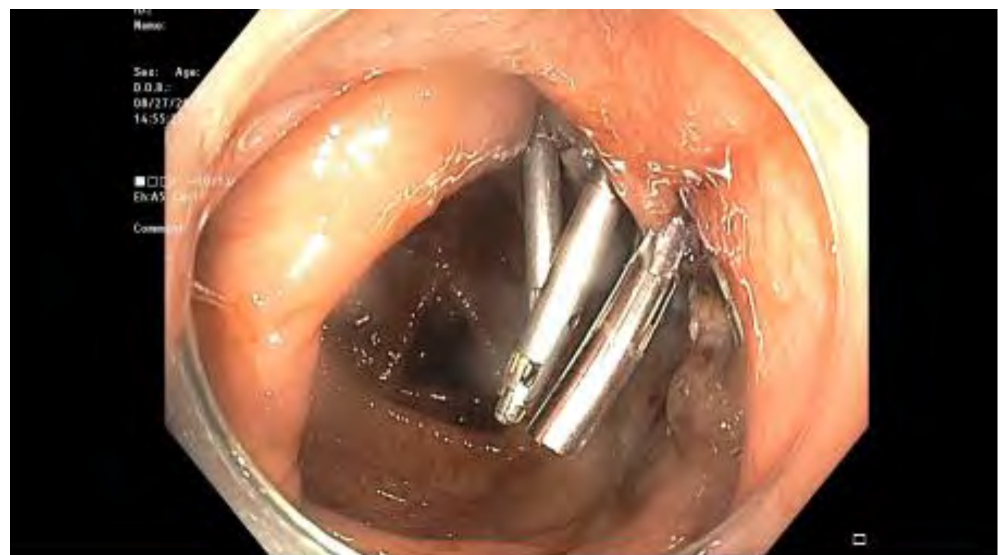
Case 6: Your Friendly Advanced Endoscopist









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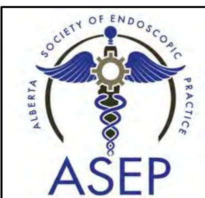
Case 6: Excellent Endoscopist and Connect Care Expert!

This pleasant 50-year-old woman recently underwent a colonoscopy due to positive FIT testing with my colleague Dr. Kolber. She is entirely asymptomatic and does not have any family history of any colon cancer. At the time of her colonoscopy, she had a 4 cm polyp that was not resected at the level of the hepatic flexure with a biopsy revealing a tubulovillous adenoma negative for high-grade dysplasia. She had 3 other polyps removed 1 of which was a tubular adenoma with focal superficial high-grade dysplasia and 2 other tubulovillous adenomas. She is not on any antithrombotics. She has a personal history of cervical cancer. She does not have any overt GI bleeding symptoms. On examination her abdomen is soft and lax. Today she presents for consideration of endoscopic mucosal resection of the right-sided polyp. We discussed the risks involved including a 5 to 8% chance of bleeding including a delayed bleed and a 1 to 1.5% chance of perforation. We also discussed the need for a 6-month site check assuming that we are successful in our resection. She is in agreement. She presents today for colonoscopy and EMR.

Findings

- Within the mid transverse colon adjacent to a tattoo, there was a 35 to 40 mm Paris Is/IIa laterally spreading granular NICE II polyp. There was a central pseudo depression which was very carefully examined under NBI and white light and there was no evidence of mucosal abnormalities that would suggest submucosal invasion as such the polyp was deemed to likely be endoscopically resectable. We started by lifting the polyp with Eleview with 1:100,000 epinephrine. The majority the polyp was resected in 4 bites using a 15 mm hot snare. Within the central portion there was an area of fibrosis where it was difficult to grasp the polyp. This area was resected using a cold snare. There was subsequently some bleeding from the scarred area that was treated with snare tip soft coagulation successfully. We subsequently applied snare tip soft coagulation to the edges of the resection site. We used 2 mantis clips and 2 Cook clips to oppose the edges of the defect for prophylaxis thereafter. This specimen was subsequently retrieved.

Kirles holding Connect Care tutorials at Diva's later tonight!



Case 6: Pathology is Tubulovillous adenoma with high-grade dysplasia. When would be her surveillance response?

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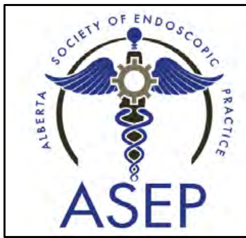
Case 6: Teaching Points

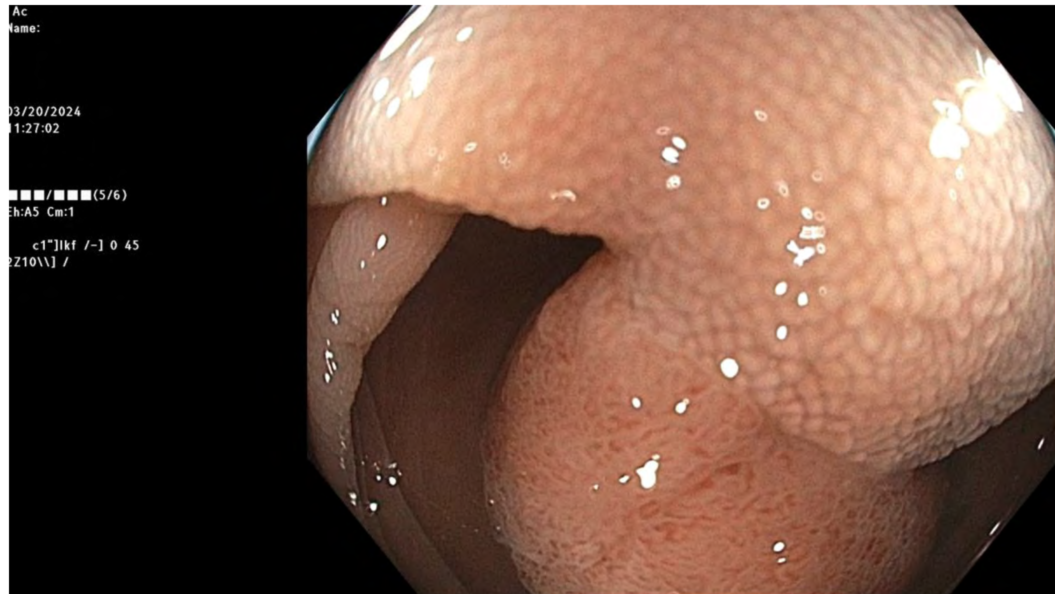
- Consider what procedure and potential risks did the patient initially consent for?
- Risks of EMR/advanced polypectomy:
  - perforation 1-2%, delayed bleed 5-8%
- If first time is the best time: who should be removing this?
- Estimate / think of cancer risk: depending on appearance, location
- Many cases (US): still going to surgery.
- 6 months FU for piecemeal resection.



Case 7: Piecemeal polypectomy

72 yo ♂ FIT case. Mom, sister with cancers NYD (60s and 50s). Smoker, drinker, hypertension. No previous endocopy.

- Initial Colon: Mar 2024. You see this on way in (sigmoid colon):



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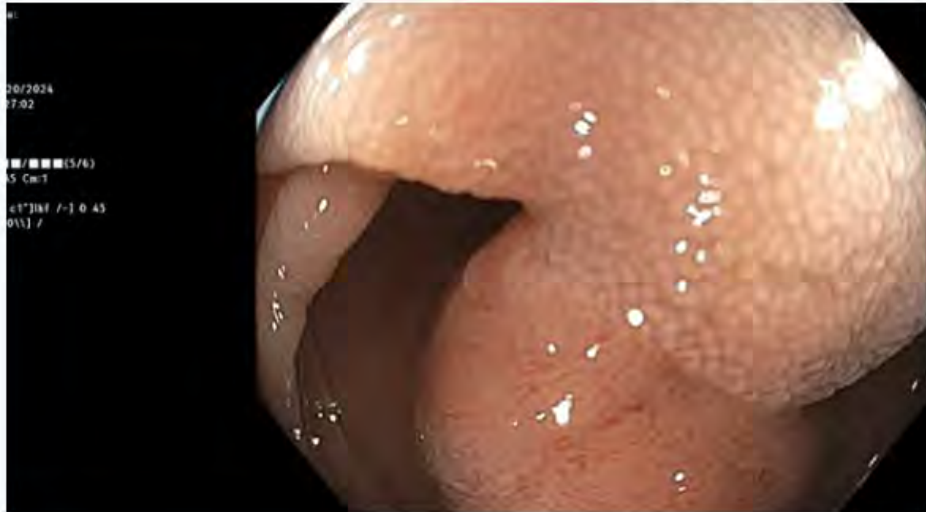
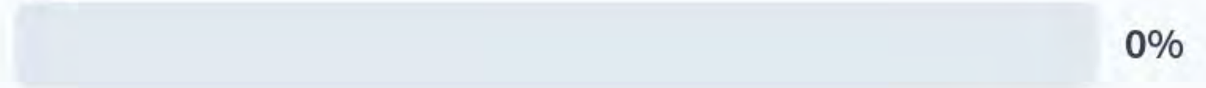
Case 7: Piecemeal polypectomy. Who would inject epi into the stalk on the way in?



Yes



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No

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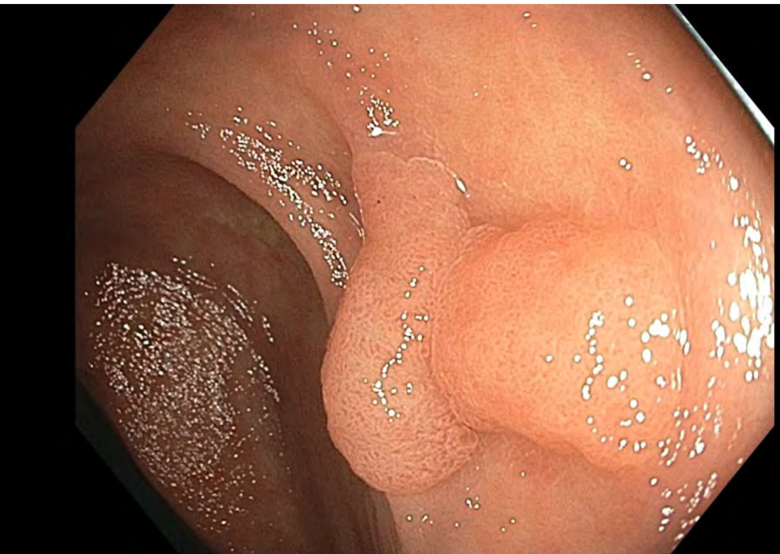
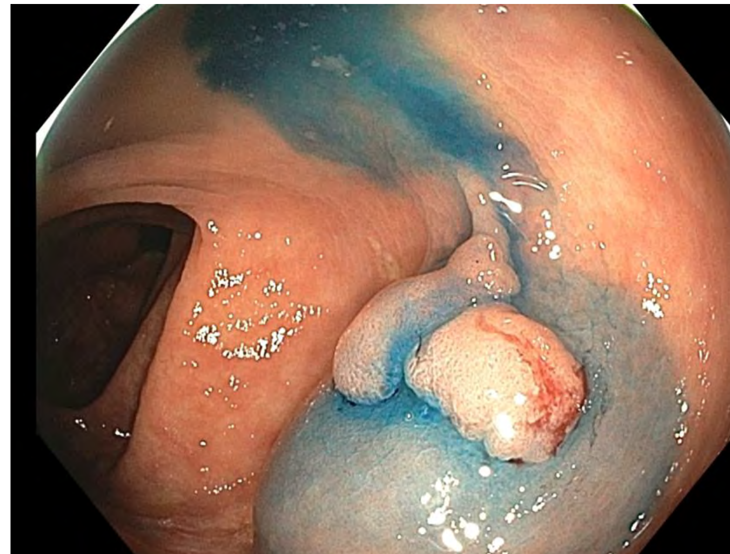
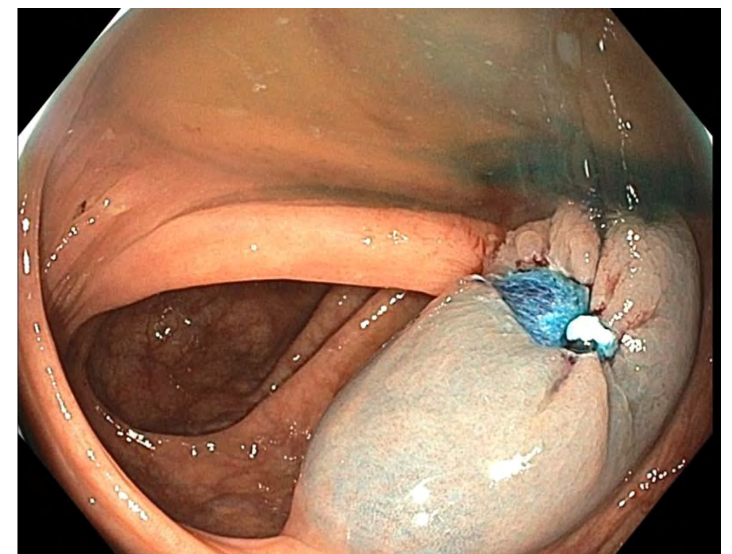
Case 7: Piecemeal polypectomy

- Initial Colonoscopy: Mar 2024. Ascending colon polyp:
  - lifted, removed and basketed out.

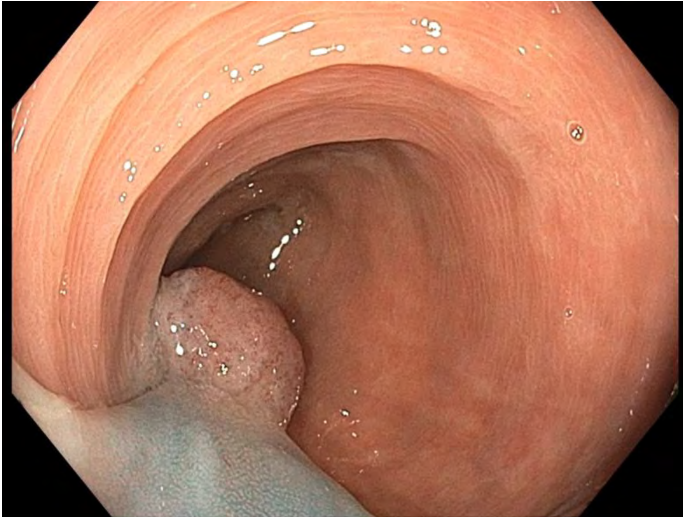


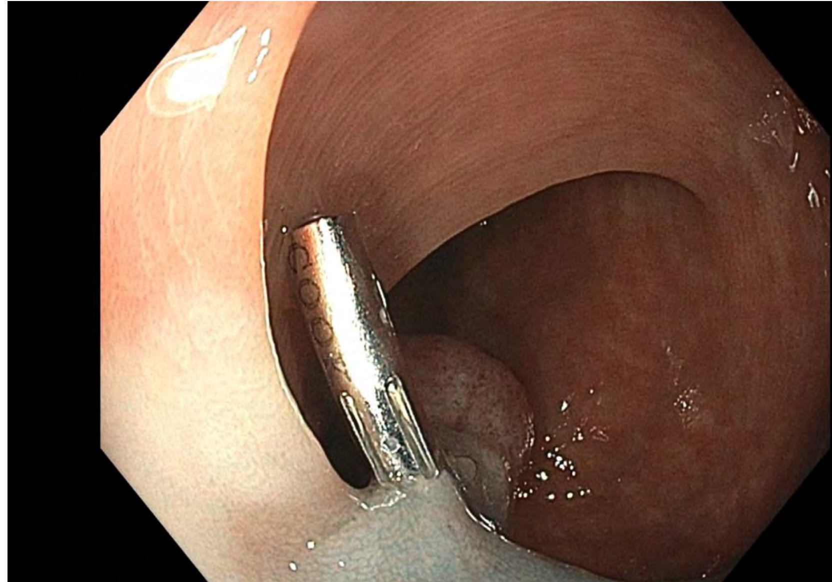


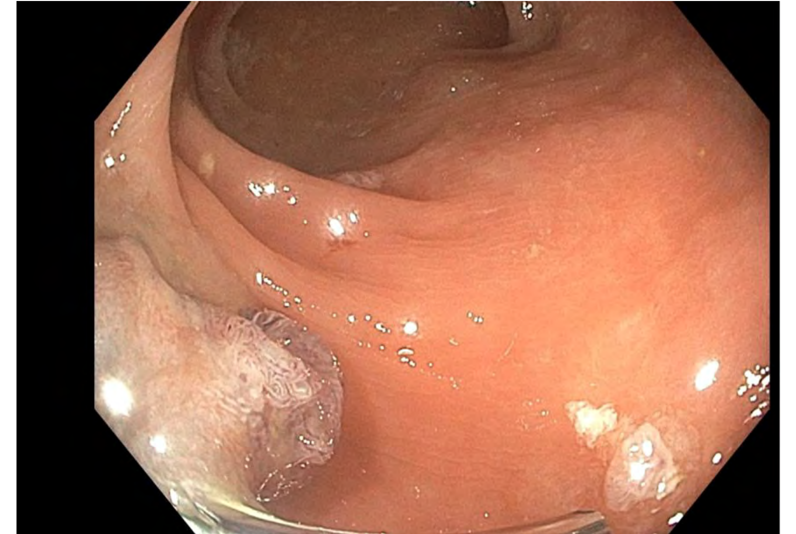


Case 7: Piecemeal polypectomy

- Initial Colonoscopy: Mar 2024: Sigmoid colon polyp
  - Post epinephrine injection

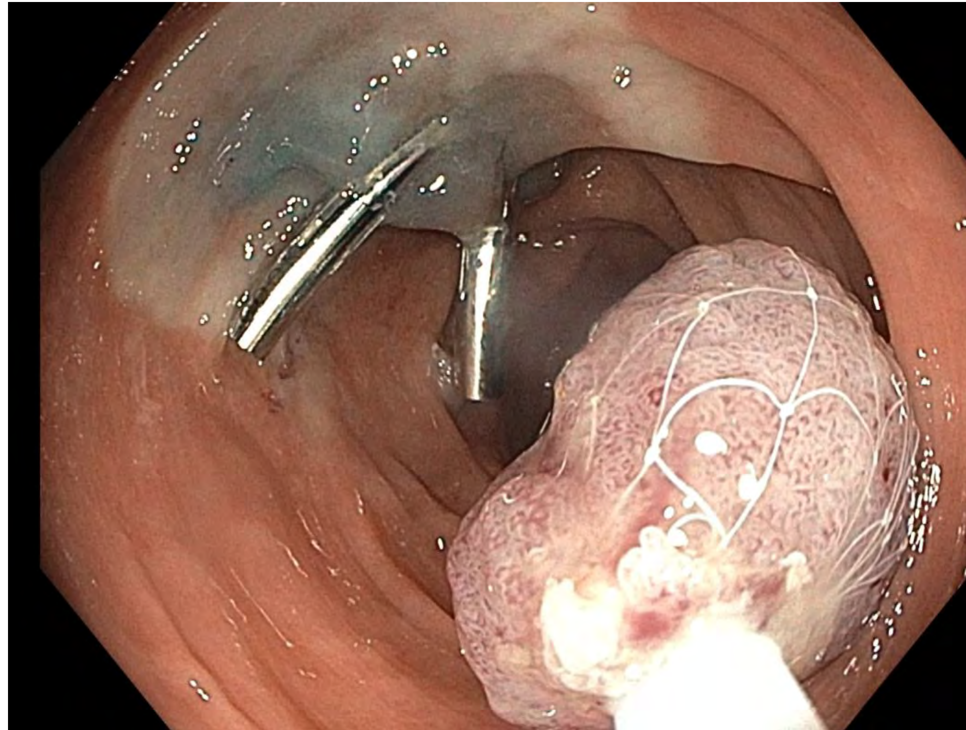




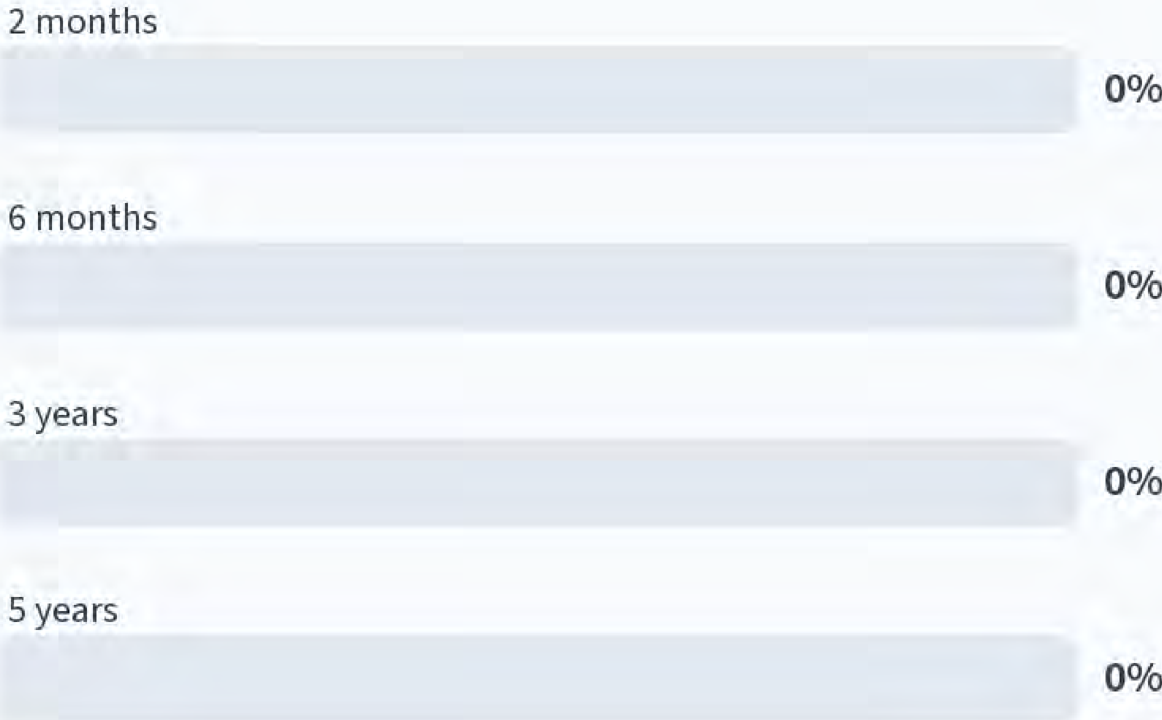


Case 7: Piecemeal polypectomy

- Remnant removed with snare. Looked like we got it all.
- Pathology = Tubulovillous adenoma



Case 7: Piecemeal polypectomy. Given the size, pathology and piecemeal removal, when would you perform the next colonoscopy?



Case 7: Piecemeal polypectomy

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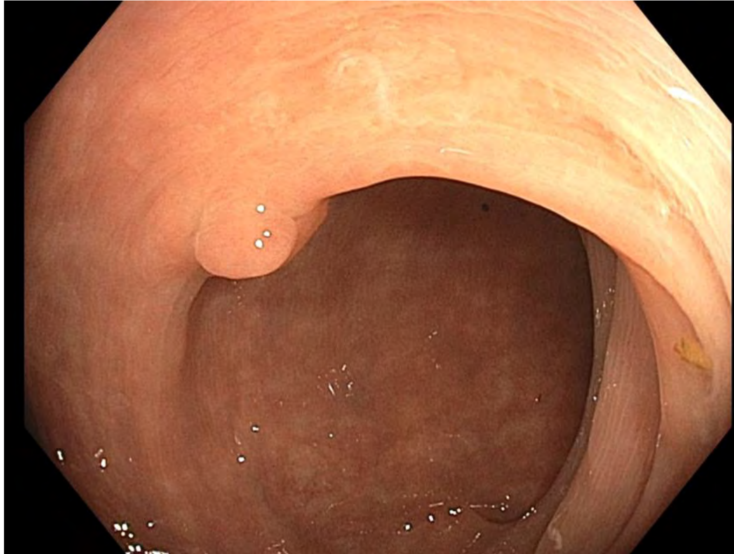
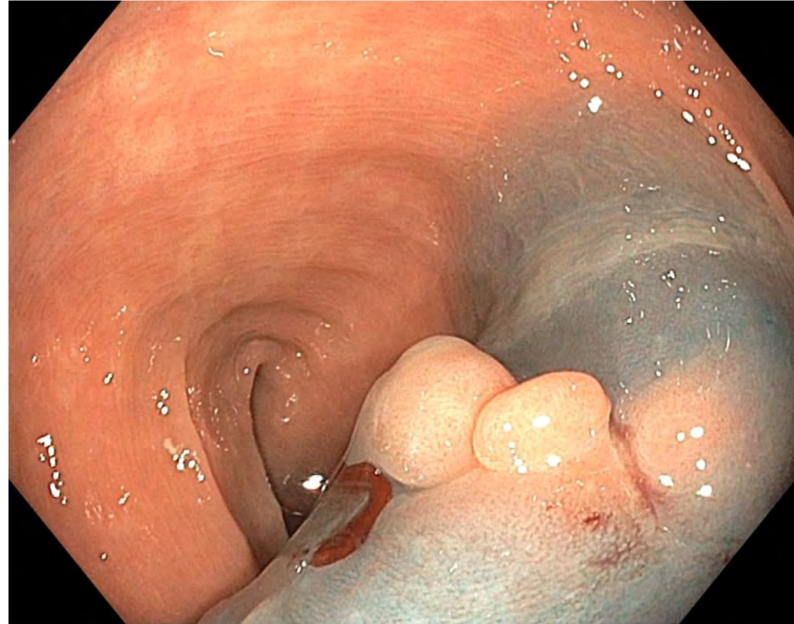
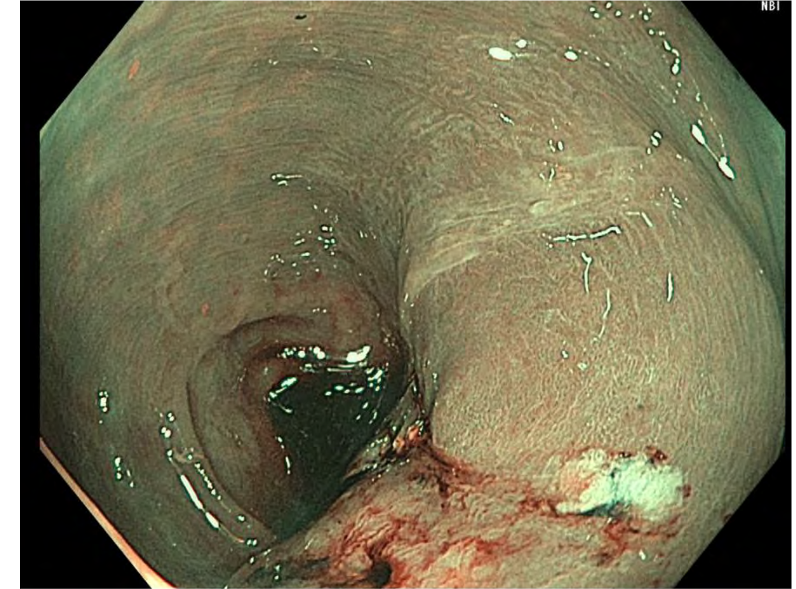
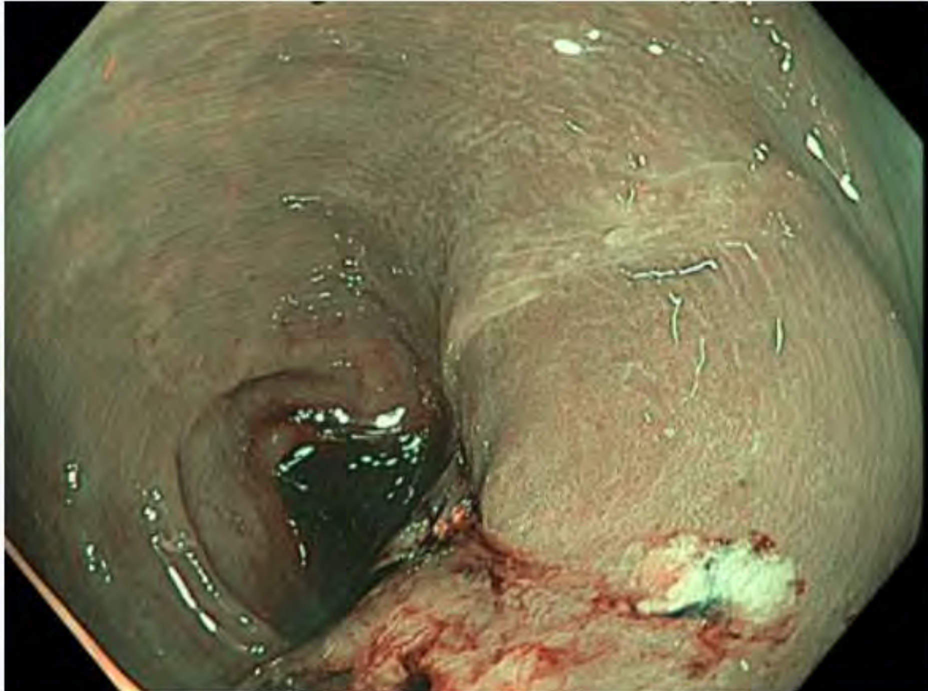
- 6 month follow up colon: Sept 2024: Remnant seen and removed







Case 7: You removed the remnant. Pathology was hyperplastic polyp. When should his next colonoscopy be?



6 months

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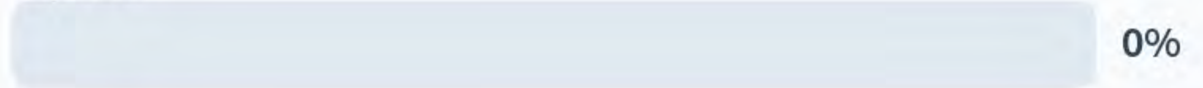
3 years



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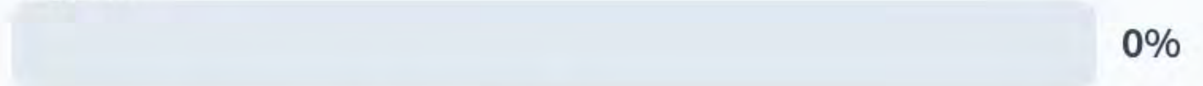
5 years



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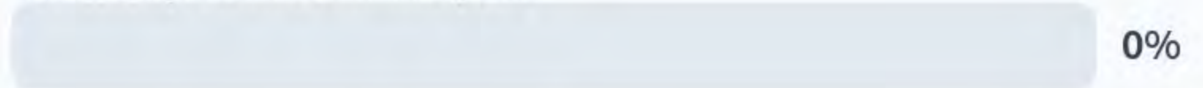
No colon, return to FIT in 5 years



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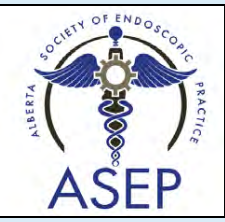
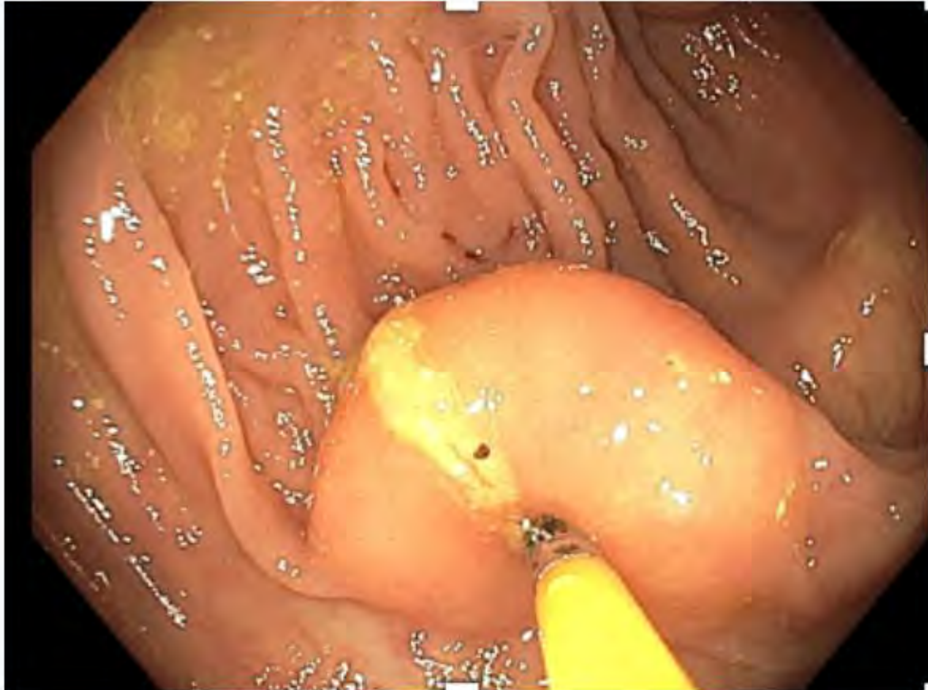
Case 8: The case of the ulcerated polyp



- 71 yo with previous R hemicolectomy for advanced adenoma cecum (2016) Path was TVA with high grade dysplasia
  - Last colon 2018: hemorrhoids, 8mm and 6 mm polyp…
- Surveillance colon July 2024

Case 8: The case of the ulcerated polyp. What sign is being shown?



The matchstick sign for sessile serrated adenoma

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The right turn sign for hepatic flexure

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There are no signs in endoscopy

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The pillow sign for lipoma

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Case 8: The case of the ulcerated polyp

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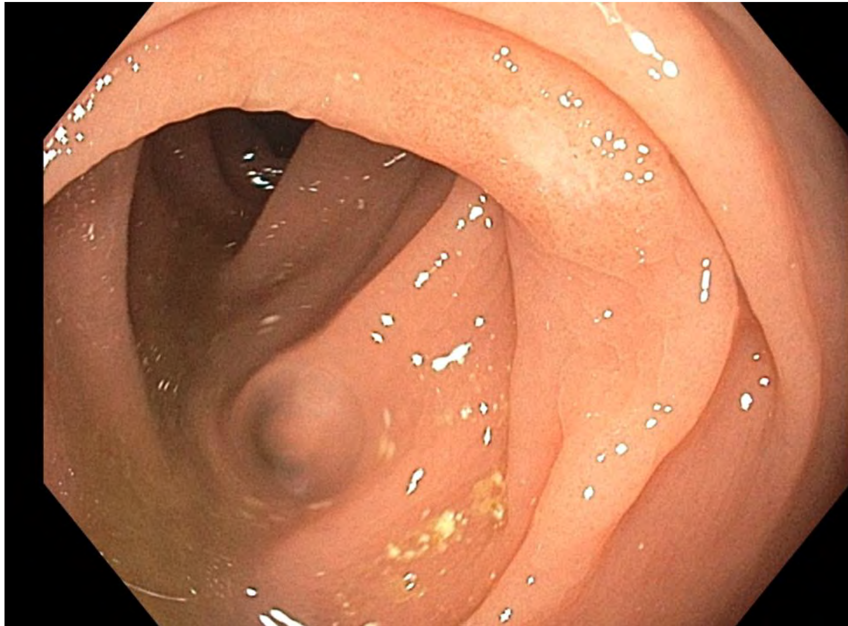
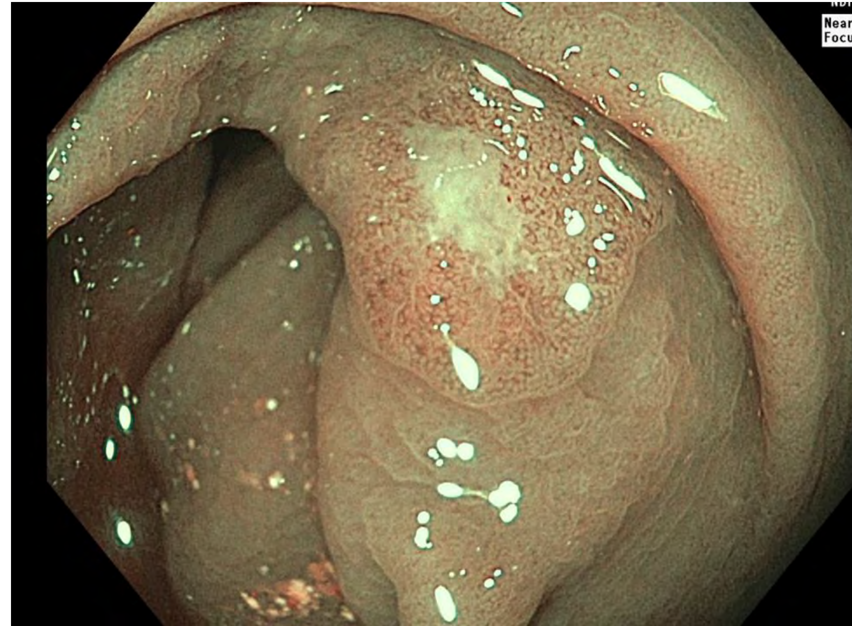
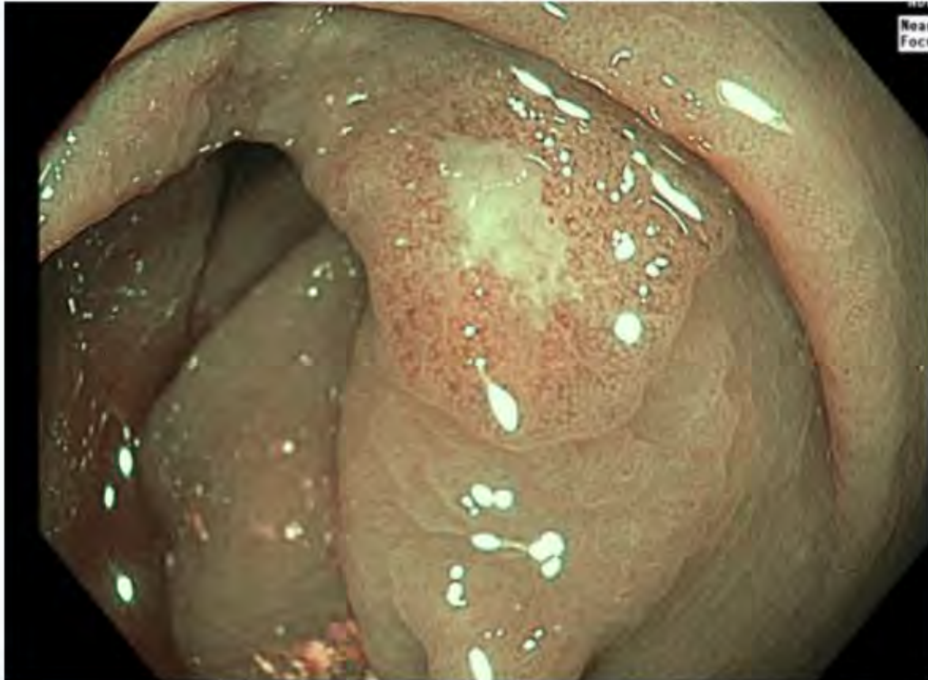
- Index colon July 2024: Desc colon polyp





Case 8: The case of the ulcerated polyp. What would you do with this polyp?



Consider it like a cancer: biopsy and send to surgeon

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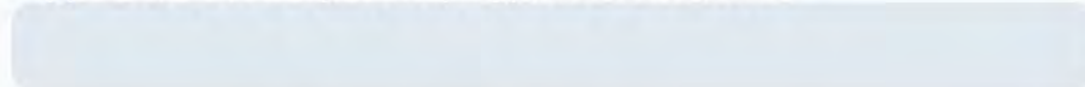
Approach it like any other polyp: lift and remove



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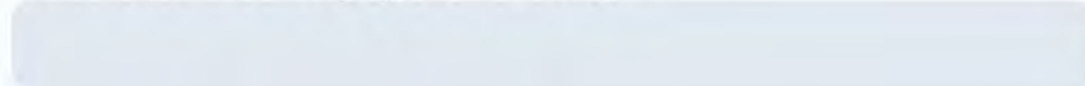
Unsure: consider biopsy and follow up



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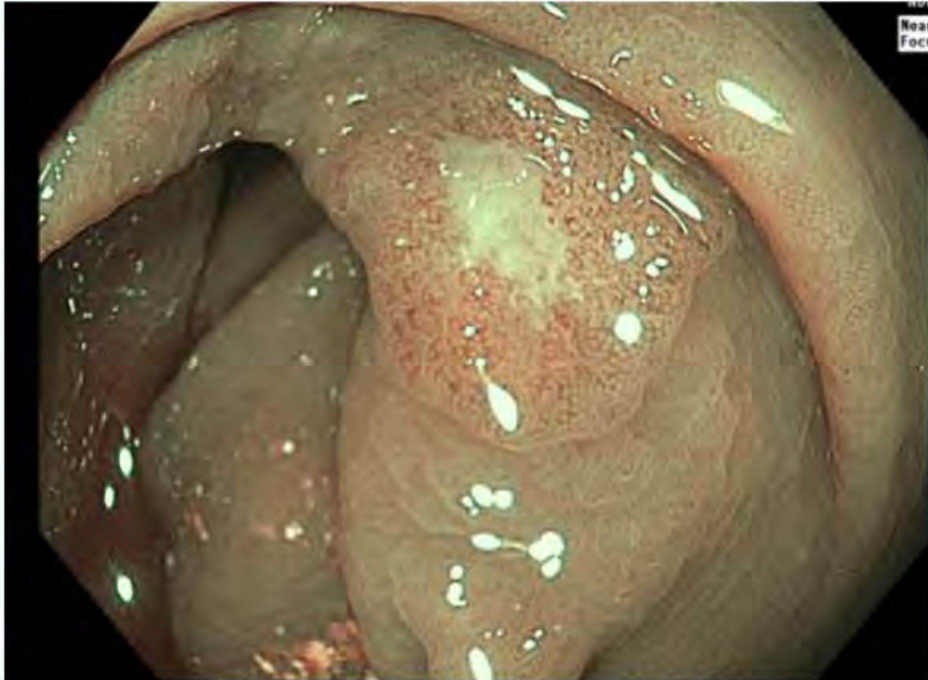
Case 8: The case of the ulcerated polyp. Biopsy = Tubular adenoma. What would you do now?



Bring back to your facility for removal by yourself

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Send to surgeon for surgery – it must be more than adenoma

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Send it to your friendly advanced endoscopist (who might be at the Endo Skills conference)

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None of the above

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Case 8: The case of the ulcerated polyp

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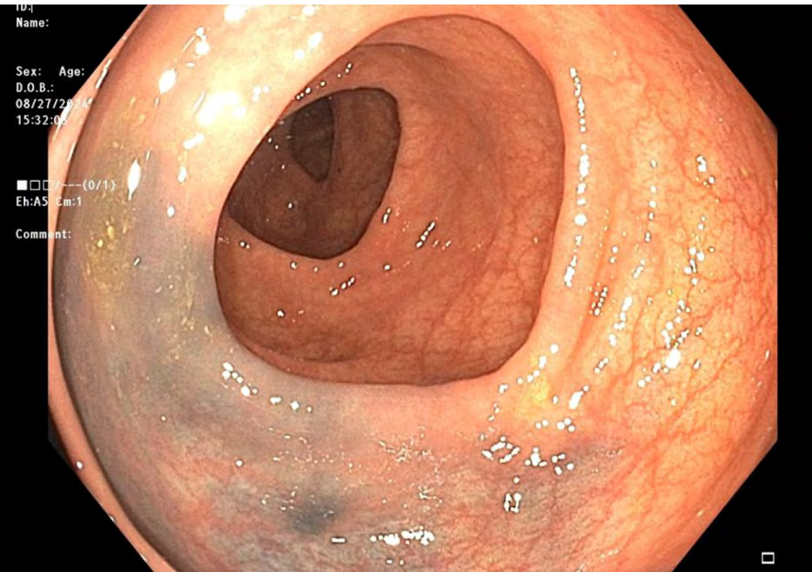
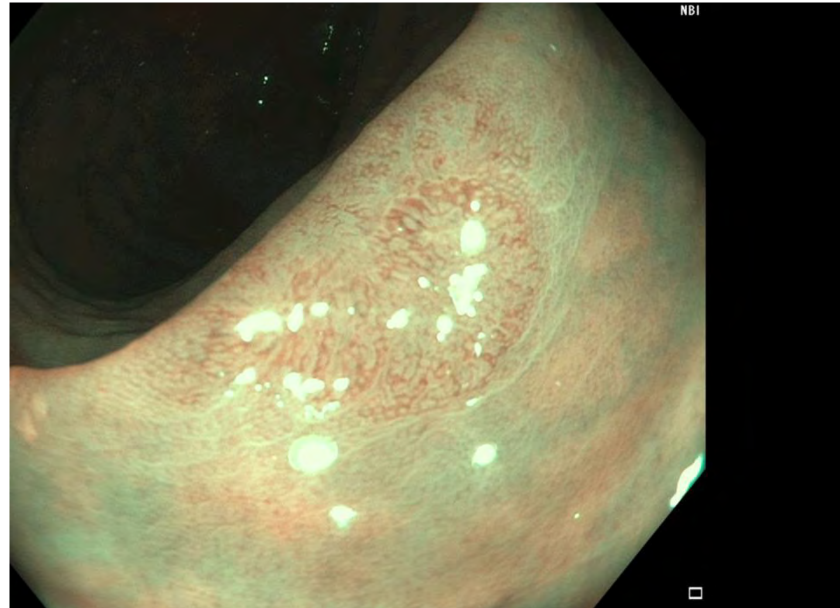
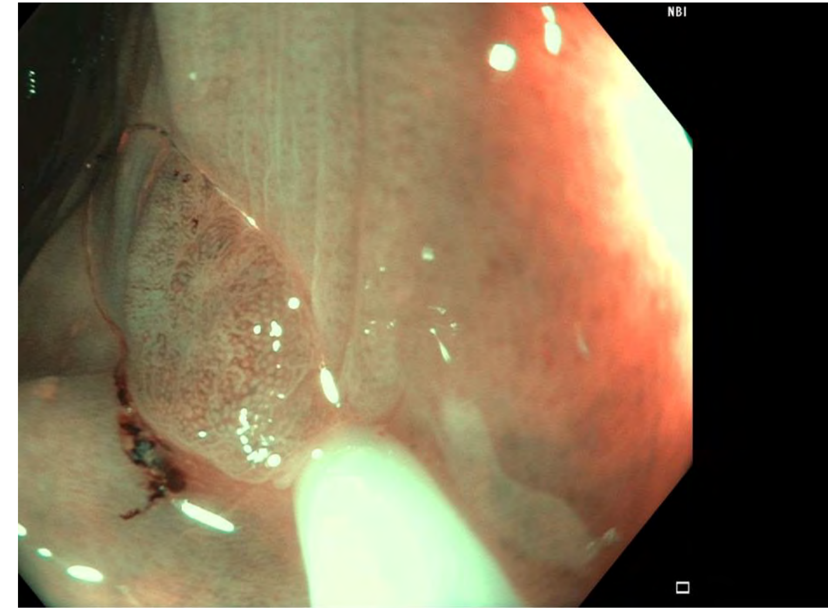
- FU colon Bishay Aug 2024. Polyp not ulcerated. Removed w snare.
- Path = Tubular adenoma

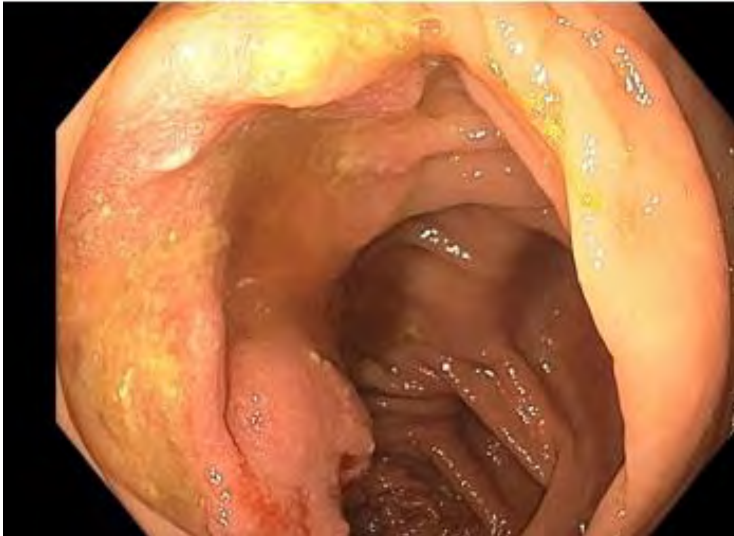


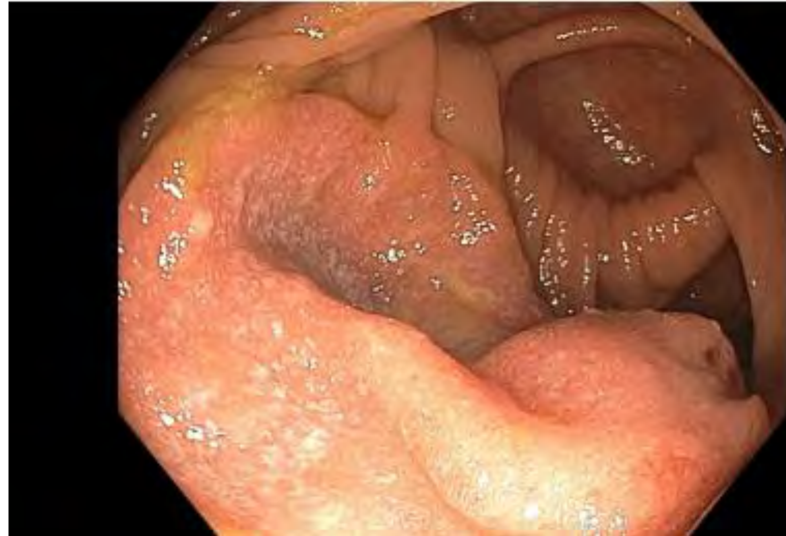


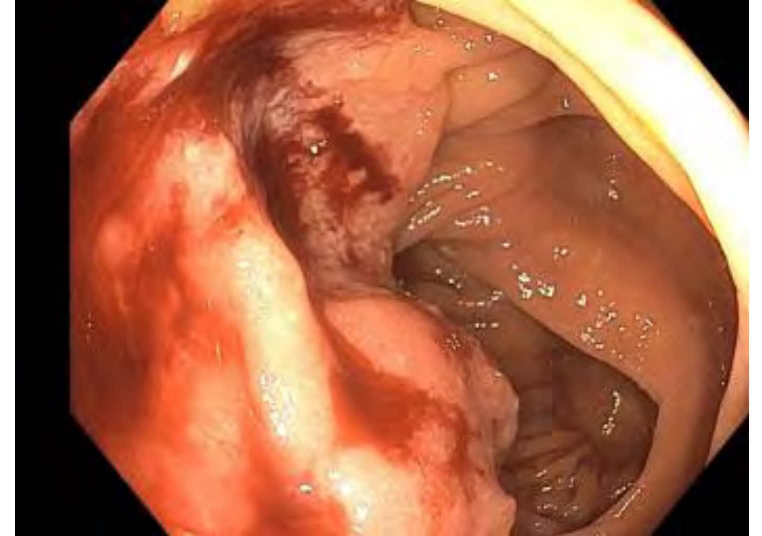


Case 9: Age = Hemoglobin

- Dec 2024: 57 yo ♂ presents with melena, fatigue, pedal edema. Hb = 65 (MCV normal), retics ↑. Gastroscopy = Barretts.
- Colon following day: You find this in ascending colon.

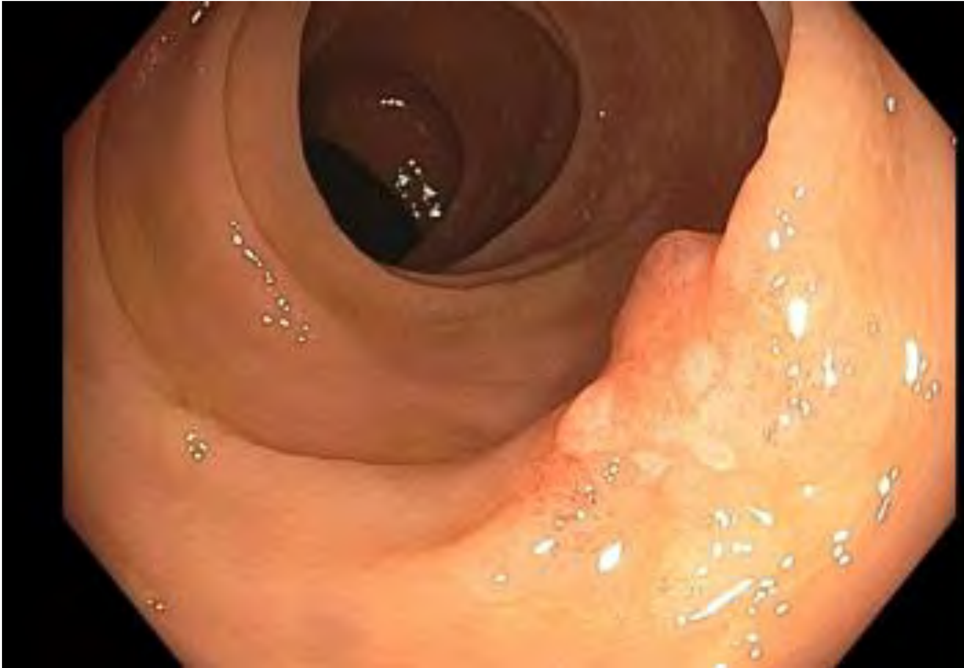


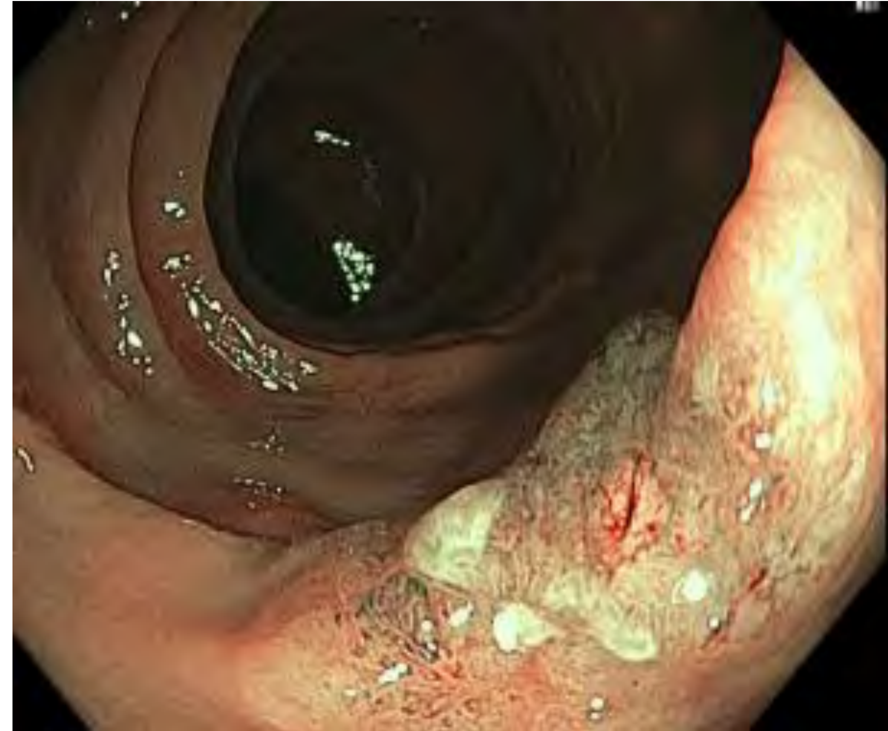




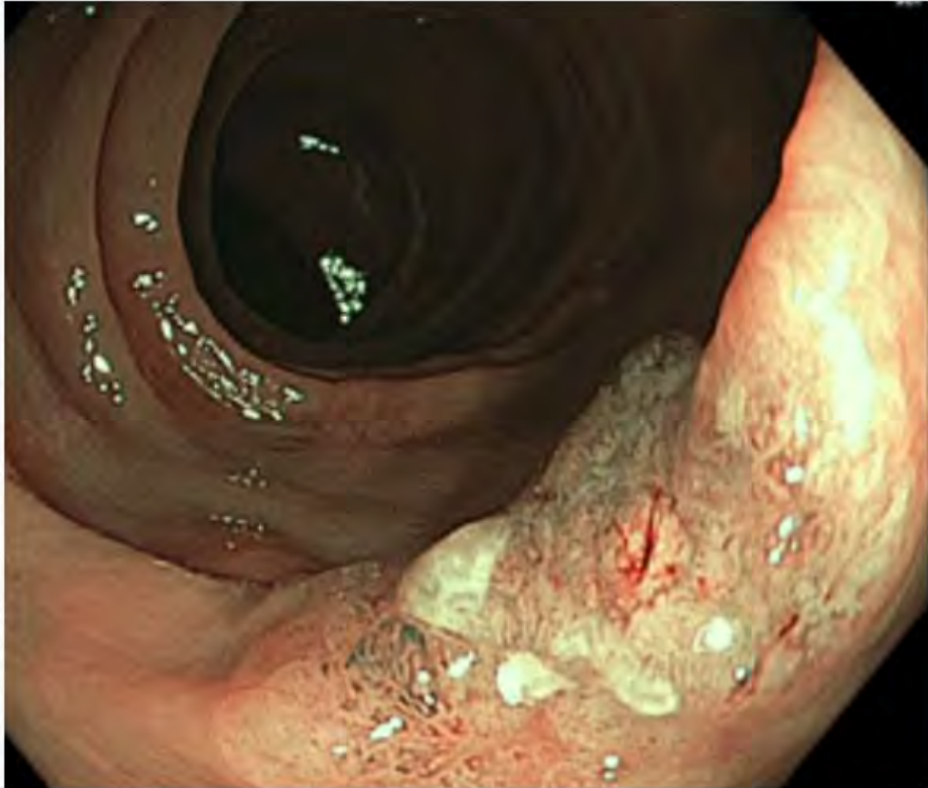
Case 9: Age = Hemoglobin

- On way back in Descending colon, you find this:





Case 9: Age = Hemoglobin. What would you do with this second lesion?



Saline lift and polypectomy

0%

Attempt polypectomy without saline lift

0%

Biopsy as this polyp really looks funny to me

0%

Send to surgeon as needs surgery for the ascending colon lesion

0%

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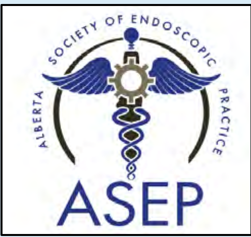
Case 9: Age = Hemoglobin: pathology



Anemia

Final Diagnosis
A. Colon (ascending mass), endoscopic biopsy:
- Fragments of invasive adenocarcinoma, well differentiated

B. Colon (descending mass), endoscopic biopsy:
- Fragments of at least high-grade dysplasia with surface ulceration, focally suspicious for invasion

Electronically signed by Adekanmbi, Idowu Joy, MD on 13/12/2024 at 11:42

Comment
B. CDX2 immunostain was performed.
Case reviewed as per AP QA guidelines.
MMR immunostain is pending

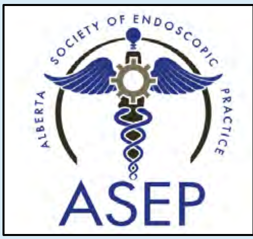
Addendum 1

ADENOCARCINOMA FROM ASCENDING COLON FOR MISMATCH REPAIR (MMR) PROTEIN PROFILE ANALYSIS:

- Mismatch-repair (MMR) protein profile is normal.

MMR protein(s) with intact nuclear expression: PMS2 (A16-4) and MSH6 (EP49).

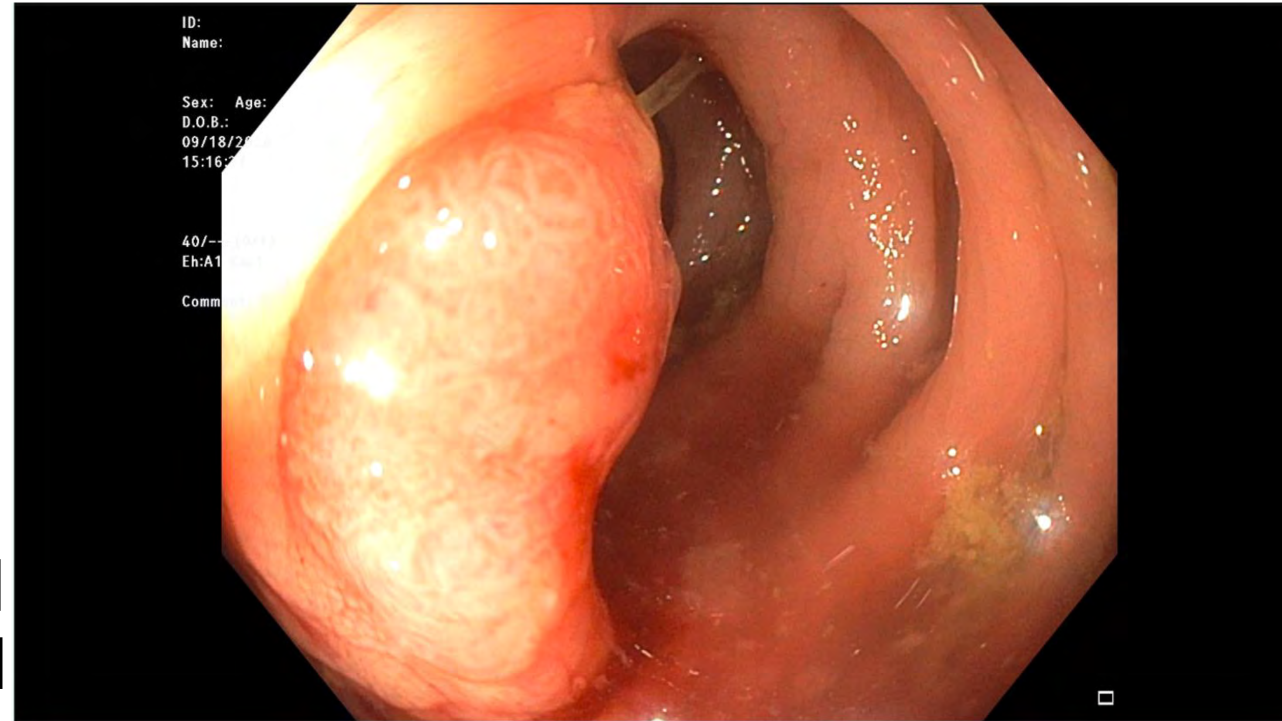
Case 9: Teaching Points



- Clear entire colon when find one cancer
  - 10% chance of synchronous cancer
- Spend time evaluating lesions
  - Pit pattern: organized or disorganized

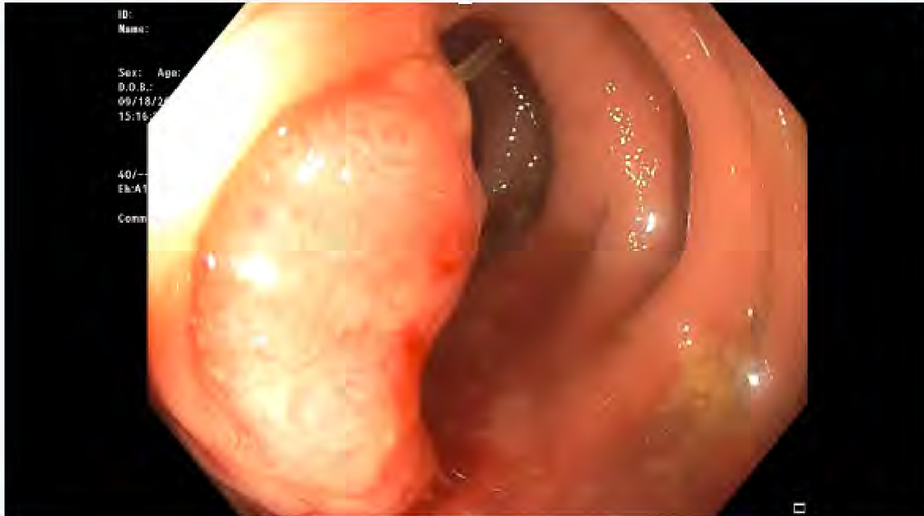
Case 10: Kirles' New Polyp Referral

- 63F +FIT referred from a colleague. BMI 43, angulated fixed colon
- Large polyp seen in sigmoid, biopsied
- "Of note, this is a challenging colonoscopy. Prep and discomfort as well as the large diverticuli throughout proved challenging and concern with large diverticuli would be perforation with future colonoscopies. "



C. Polyp (sigmoid at 30 cm), biopsy:
Tubulovillous adenoma, negative for high-grade dysplasia

Case 10: Kirles New Polyp Referral: Reviewing the case on Connectcare including the provided image. What would you do next?



(A) Book colonoscopy for 60 min

0%

(B) Refer directly to general surgery

0%

(C) Advise colleague that this is “easy” and do it themselves

0%

(D) Unsure what to do, as I dont see the whole polyp"

0%

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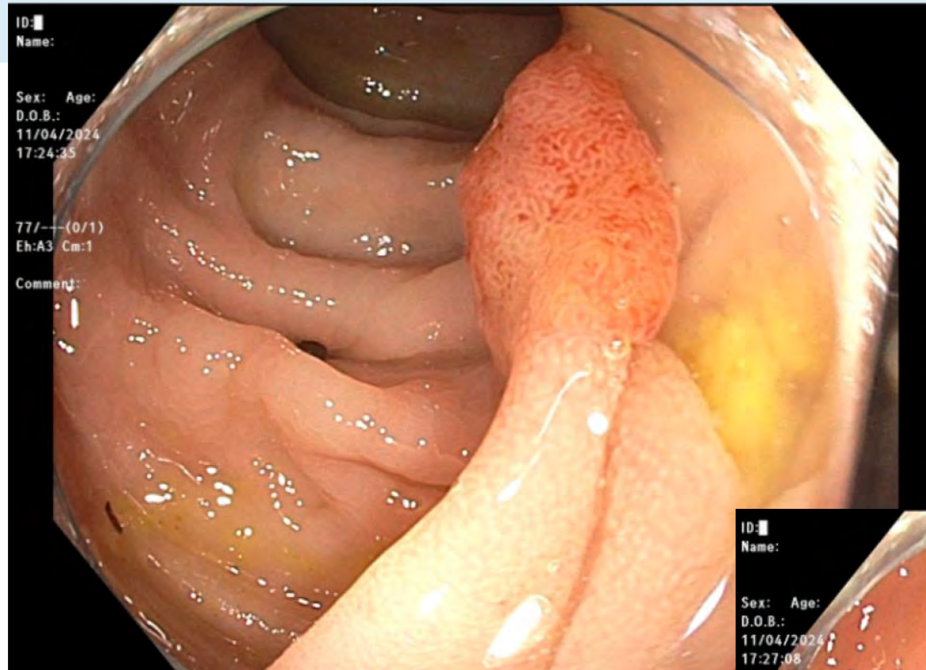
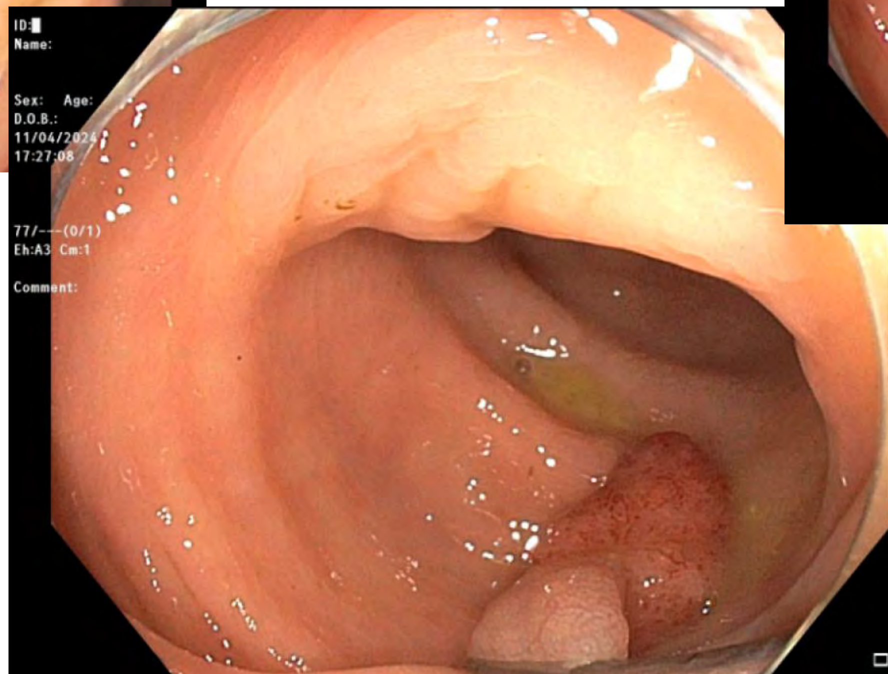
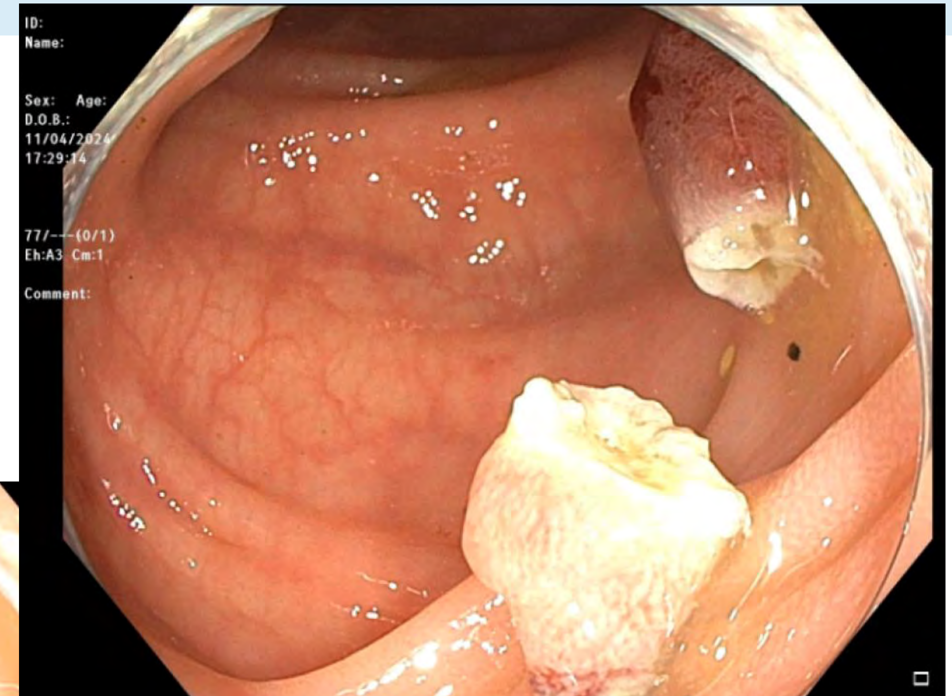
Case 10: Kirles’ New Polyp Referral (Bonus polyp)



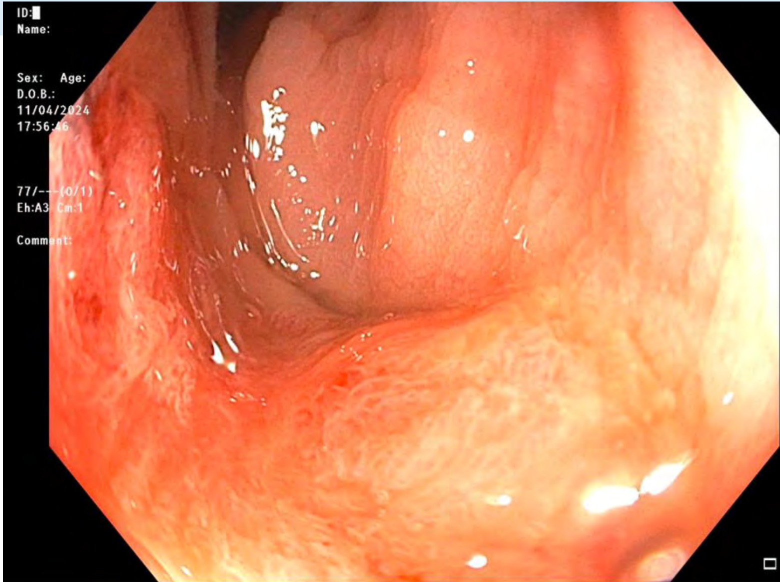


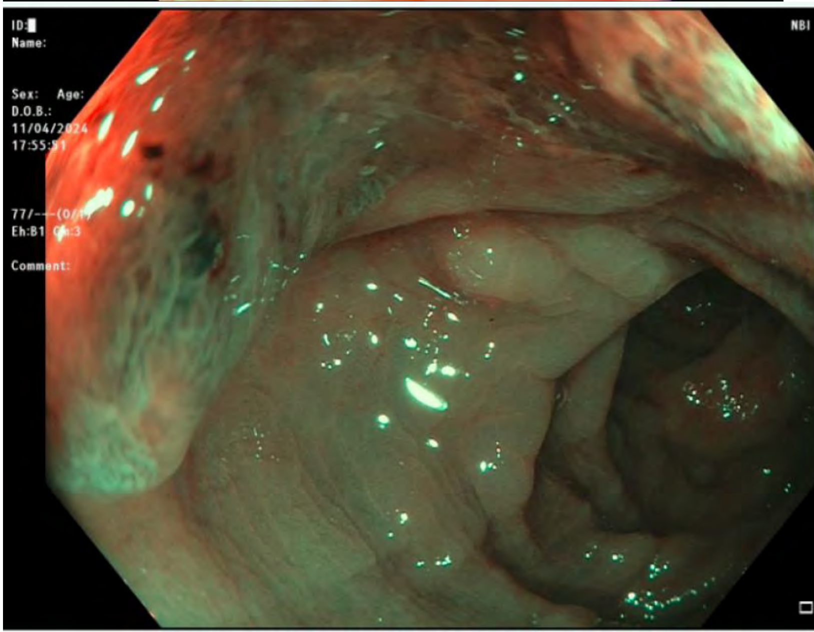


Case 10: Kirles' New Polyp Referral: Hard colon, see polyp in question, but disappears around a tough fold. What next?

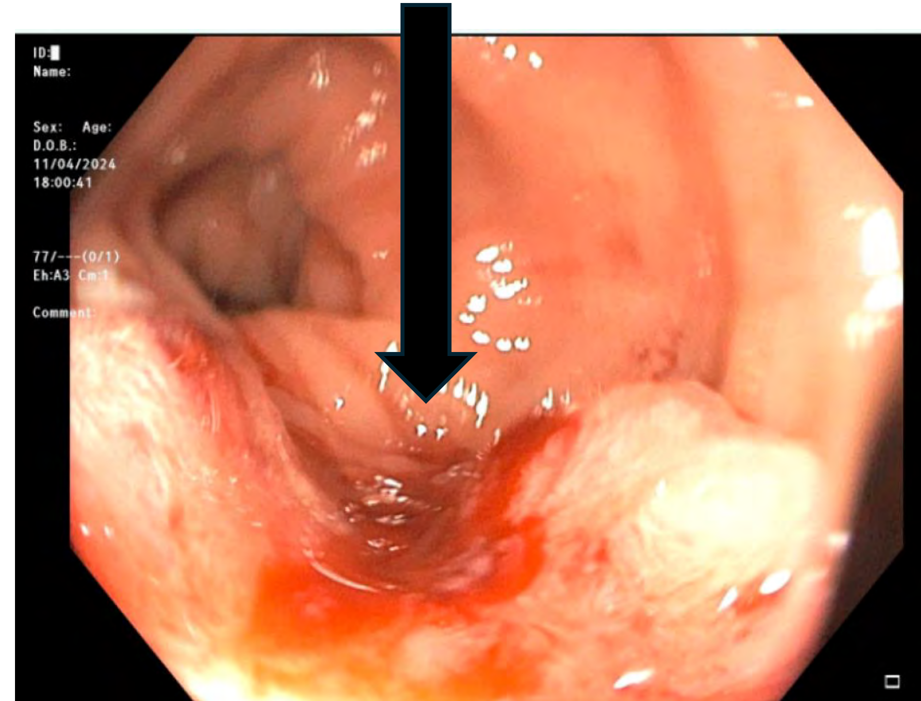
Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

I turned the patient and looked more





Biopsied
Here

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B.  Sigmoid colon mass, biopsy:
- Adenocarcinoma (see comment).
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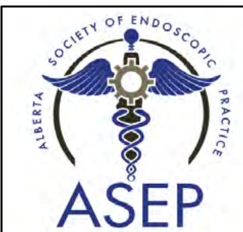
Case 10: Teaching Points

- If you can’t see the whole lesion don’t try to resect
- If lesion over fold/around flexure, turn the patient- gravity is your friend!
- Need to biopsy the right spot

Overall Day 2: Case Based Teaching Points

- First time is the best time for polyp removal
  - Who, where and when (did they consent for advanced removal)
- Surveillance intervals: size, piecemeal vs enbloc, pathology
- Biopsy (limited) of suspicious lesion: cancer vs polyp
  - Estimation of cancer risk
- Assessment of a lesion:
  - Far, close, closer (optical biopsies)
  - Determine size, Paris classification
  - Different light sources
  - Rotation for different position
- Synchronous cancers exist



Thank you for your attention

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